Chapter 2: Alternatives

Draft Upper Deschutes Resource Management Plan and Environmental Impact Statement

This chapter describes alternative ways of resolving the planning issues and sustaining the long-term health, diversity and productivity of public lands in the planning area. The population of Central Oregon is predicted to nearly double over the next twenty years, and this growth would increase human demands on public lands, and conflicts between uses and users. The range of alternatives includes different approaches to balancing these demands and reducing conflicts.

Developing the Range of Alternatives

The range of alternatives was developed using ideas brought forth through public scoping and by the Issue, Intergovernmental, and BLM Interdisciplinary teams. The alternatives use different methods to resolve the significant issues identified during scoping in different ways. These issues were arranged into the following Issue Categories: Ecosystem Health and Diversity (including Vegetation, Wildlife, Fire/Fuels, Hydrology, and Special Management Areas), Land Ownership, Transportation and Access, Land Uses (including Forest and Range Products, Livestock Grazing, Minerals, and Military Uses), Visual Resources, Recreation, Public Health and Safety and Archaeology. The public's interest in resource development and using these lands also played a major role in developing the alternatives. Conservation measures, or mitigations, were often developed to help resolve or minimize matters of controversy, dispute or concern specific to overlapping resource management activities or conflicting land uses.

The range of alternatives responds to a variety of human demands and, under all alternatives, provides management direction to sustain a healthy ecosystem. The alternatives are combinations of decisions about resource allocations and allowable uses that will guide site-specific decisions on public lands for the next 10-20 years.

There are some elements that are found in all alternatives. These elements are identified as "Common to All Alternatives." Elements that are Common to All Alternatives are not being revised by this DEIS and reflect the following categories of management direction:

- 1. Management Direction from legal statute, regulation, or manual direction. This management direction may not have specifically been reflected in Brothers-La Pine Resource Management Plan (B/LP RMP, ROD 1989). This includes management direction for things such as restricted uses near bald eagle nests or current regional decisions on noxious weed abatement techniques.
- 2. Management Direction from B/LP RMP, including amendments by subsequent modifications from other decisions that are not being revised by the Upper Deschutes Resource Management Plan (see also Chapter 1 and Appendix C).

This existing management direction was incorporated into the goals, objectives, and guidelines Common to All Alternatives and described in detail in Appendix A.

In addition, some of the issues identified early in this planning process were resolved using one approach in the "action alternatives" rather than re-evaluating the same approach throughout the action alternatives. These are identified under the category "Common to Alternatives 2 - 7." This management guidance represents areas where there was little controversy over the best way to resolve the issue. One example of this approach is the common management direction for the "action" alternatives for Archeological resources considered "at risk." The common approach categorizes "at risk" resources, prioritizes those resources for future actions, and limits uses that have a high likelihood of significantly impacting the integrity of those resources. Other components included in this category are summarized later in this chapter with detailed objectives and guidelines described in Appendix A.

Key Concepts

There are a number of key concepts used to develop the alternatives that are helpful to understand prior to reading the alternative descriptions. These are briefly described below

Urban and Rural Areas

The Upper Deschutes Resource Management Plan alternatives are shaped significantly by the dynamics of the communities that inhabit this area. As described in other parts of this document, those dynamics are driven in large part by the changing rural and urban character of the population and economies. This is reflected both in terms of resource demands and cultural or community identities.

Alternatives 5, 6, and 7 reflect those changing dynamics and community identity needs with management emphasis for certain lands based on the relative "urban" or "rural" character of the surrounding (non-BLM) land uses within the planning area. This concept is meant to capture the relationship of BLM-administered lands to the expected changes in population growth and development in different parts of the planning area –including some differences in management emphasis that relate to the conflicts, demands, and cultural values of the diverse communities within the planning area. This distinction depends on the changing conditions of the surrounding land uses rather than a strict geographic or demographic interpretation of current conditions. Therefore, there is no hard-and-fast line dividing these areas. In general, BLM administered lands within the planning area considered "urban" have one of the following characteristics:

- They are adjacent to urban or rural population centers including high density non-conforming rural land uses, residential or resort zoning, or small acreage development;
- They are in areas where non-public land ownership tends to be highly fragmented, and flanked or surrounded by BLM-administered lands.

Those lands considered "rural" in the planning area generally have the following characteristics:

- They are adjacent to large blocks of agricultural zones and uses;
- The public ownership may be fragmented, often without public access, but usually surrounded by low density development associated with rural agricultural rather than rural residential or small acreage developments;
- The public lands are in generally large contiguous blocks adjacent to national forests and grasslands or other BLM-administered lands to the east.

Conflict and Demand

All of the alternatives are concerned with balancing conflict and demand. As described in the issues, the need to revise the B/LP RMP is based largely on unanticipated potential conflicts with or the changing and increasing variety of resource demands in this area. This is especially apparent between recreational user groups and between adjacent rural or urban residents and public land use such as motorized recreation, livestock grazing, and mineral development.

Land Uses - Livestock Grazing and Mineral Development

The Issue Teams developed a conceptual framework to evaluate the conditions under which livestock grazing and mineral sales would generally be made available during the planning cycle. The framework considers—on a broad scale—factors that contribute to both the potential for conflict and the potential demand or importance of those uses. The criteria developed by the Issue Teams was used for Alternatives 2-6, and modified in Alternative 7, the Preferred Alternative. The criteria were modified by the Preferred Alternative Subcommittee during the consensus process on the Preferred Alternative and were recommended to be included in the Preferred Alternative by the Deschutes Provincial Advisory Committee (see Chapter 5).

Recreation – Emphasis, Travel and Access Management, and Season of Use

Conflicts in the planning area occur between public land visitors and adjacent landowners as well as between different types of recreationists (e.g., motorized vs. non-motorized users). Conflicts also occur between similar recreational visitors, such as when a motorized trail system becomes crowded and results in unsafe conditions (dust, poor visibility, large number of encounters). The demand for meeting multiple recreation needs is increasing. The UDRMP approaches the issue of conflicts by designating different areas for different users or by separating different trail users in a particular area by creating separate motorized and non-motorized route systems. These travel management designations vary by geographic area in each alternative and are based on the potential for conflict, recreational demand, or other resource concerns.

The recreation emphasis designations include:

- Multiple use shared facilities combines motorized and non-motorized users on the same roads, trails, or trailheads in the same area.
- Multiple use separate facilities combines uses in the same area, but provides some level of separate facilities.
- Non-motorized recreation emphasis emphasizes shared use in the same area, with motorized use limited to roads and trails provided for non-motorized use.
- Non-motorized recreation exclusive closes the area to motorized use and emphasizes non-motorized trail use. Motorized use in the area only for administrative requirements or to access recreation facilities.¹
- Non-recreation emphasis these include tracts of BLM-administered lands that are managed for research purposes (i.e., RNAs) or as administrative sites or leases.
- Roads only emphasis areas where any trail development is unlikely to occur within the planning cycle due to location, size or fragmented nature of the public land parcel.

Travel management designations of Open, Limited, or Closed are applied to motorized off-road use as required by BLM policy. The B/LP RMP applies a specific designation to each geographic area that compliments the recreational emphasis of that area. Each travel management designation also has a season of use associated with motorized travel in the area (see also Glossary for definitions of Open, Limited, and Closed).

¹ Note that only BLM-lands and rights-of-way under BLM jurisdiction may be closed to motorized use under this designation. County roads or state highways are not subject to this designation unless specifically noted.

Ecosystem Health and Diversity

Vegetation

The alternatives compare the following management emphases:

"Current Distribution" reflects a management emphasis on shaping vegetative communities to rehabilitate specific areas or to achieve specific resource objectives in priority areas. The assumption is that caring for resources in this way will produce spin-off benefits for all human needs, including ecological, social and economic. For example, the primary objectives of a vegetation restoration project could be seeding forbs to restore a foraging area for sage grouse or cutting sagebrush to improve habitat for Peck's milkvetch. There would be no emphasis on treating landscapes to expand plant communities toward a "pre-European" range, although pre-European conditions may be replicated in some areas. In reality, some high priority areas would overlap and be treated similarly to the strategy employed under "historic" management. However, treatment units and habitat patch sizes would generally be smaller and overall project treatment acres would be fewer than under the historic emphasis. Prescribed fire and mechanical techniques would be used in concert to achieve desired objectives. Key plant communities and habitat types would be treated to achieve optimum productivity, diversity, or some other specified objective identified at the project level. Use of mechanical treatments as a tool would be emphasized in wildland-urban interface areas.

"Historic Range of Variability" reflects more emphasis on a return toward "pre-European" conditions and distribution. While this does not mean replicating exact conditions from a selected date in the past, this approach manages the ecosystem for a combination of patterns, patch sizes, species distribution, and seral stages that are consistent with expected fire frequency, intensity and distribution. Historic condition and distribution is a management strategy derived from the assumption that ecosystems were in equilibrium and functioning as they were intended based on evolutionary adaptations that occurred under the influence of natural geologic, climatic, and ecological processes. Use of prescribed fire can come closer to approximating those conditions than most mechanical treatment approaches, so fire would be emphasized as a management tool where practical. There would be an emphasis on managing juniper within its inherent role on the landscape, restoring many areas where young juniper have encroached to an earlier seral condition. Vegetation treatments would be designed to limit juniper occupancy to those fire-resistant areas and at historic densities. Historic condition, structure and composition of old-growth juniper woodland, ponderosa pine stands, meadows, and riparian communities would be restored and expanded to their historic ranges where practical. Use of mechanical treatments would be emphasized in wildland-urban interface areas. These areas may depart from historic conditions in some cases to facilitate fire-safe communities.

Wildlife

Some of the issues that influenced the development of these alternatives include habitat patch size, quality, connectedness and human disturbance effects in relation to meeting species needs. The public's interest in how these lands are used also played a role in shaping the alternatives by influencing the development of conservation measures or mitigations to help resolve conflicts between commodity and recreational uses and the needs of a variety of wildlife species.

"The conservation of wildlife and of biological diversity at large has taken various approaches in the U.S. Sometimes the focus is on the provisions of life requisites for a single species of plant or animal, such as spotted owls, elk or grizzly bears. Sometimes it is on the provision of habitats for a suite of species, i.e., a guild or biological community, such as cavity-dependent or wetland-associated animals. And sometimes the focus is

on ecosystems, i.e., integrated systems of land, water, and biota in contiguous areas, e.g., watersheds, landscapes, or regions" (Johnson and O'Neil, 2001). In general, this plan uses all three of these approaches for management and assessment of wildlife resources.

In this plan management considerations are directed at some individual species such as bald eagles, sage grouse, deer, elk and pronghorn, and at groups of species addressed by the use of source habitats such as shrub-steppe, juniper woodlands and riparian habitats. The Standards and Guides represent an ecological approach for integrating livestock use with wildlife needs, and is an integral part of these approaches.

The approach this plan has taken is to generally follow a system of single- and multi-species management emphases to enable the resource management plan and environmental impact statement to: address both single- and multi-species needs depending on objectives; identify broad-scale patterns of habitat change that affect multiple species in a similar manner; address the needs of many species efficiently; and describe the management of some individual species of high public interest.

Source Habitats

The source habitat management concepts used in this plan have been adapted from the strategy developed in the Interior Columbia Basin Ecosystem Management Project (ICBEMP) for managing terrestrial source habitats. This ties management approaches taken in this Resource Management Plan to the scientific information developed as a part of the ICBEMP, which was a larger-scale assessment and management strategy that encompassed this planning area.

Source habitats are those characteristics of vegetation that contribute to a species' population maintenance or growth over time and within an area. These source habitats are described using the dominant vegetation cover type and the structural stage, various combinations of which make up the source habitats for the terrestrial families² and provide the range of vegetation conditions required by these species for cover, food, reproduction, and other needs.

The source habitat component of the UDRMP has been developed to consider and provide habitat for productive and diverse populations and communities of plant and animal species; provide for recovery of listed species; provide habitat capable of supporting harvestable resources; and provide for habitats on BLM administered lands. The purpose of providing management direction regarding source habitats is to change declining trends in terrestrial habitats by maintaining important vegetation characteristics (such as plant species composition, rangeland and forest vegetation structure, snags, and coarse woody debris), which various terrestrial species need to survive and reproduce.

Management direction for source habitat occurs in Alternatives 2 through 7, and has two different approaches that are linked to the vegetation management approaches of using current versus historic distribution. The first approach, used in Alternatives 2, 4 and 5, would manage for source habitats only within their current geographic distribution and would impart a greater emphasis on continuing to provide cover for deer and elk where it currently exists, regardless of whether that reflected an historic distribution of cover components in the planning area. The second approach, used in Alternatives 3, 6, and 7, would manage for source habitats in their historic geographic distribution, by increasing their current geographic distribution, and improving connectivity and patch size (typically for shrub-steppe habitats, and to a lesser degree ponderosa pine habitats, but typically decreasing the amount and distribution of juniper woodlands and lodgepole pine habitats). The "historic" approach emphasizes biological diversity where management is focused more on maintaining and restoring conditions similar to those developed by natural disturbance processes.

² Family (of groups) – a collection of groups of species that share general similarities in source habitats, with similarities arranged along major vegetative themes that are conventionally addressed by managers (Wisdom et. al., 2000).

Habitat Effectiveness

It is possible that areas containing abundant source habitats may not support persistent populations of some species because of disturbance and fragmentation primarily associated with roads; for instance, source habitats may contribute to positive or stationary population growth, but the road effect may override the habitat effect, thereby resulting in a sink environment³ (Wisdom *et al.*, 2000, p. 5).

Habitats contribute more to wildlife populations depending on the condition and this can be displayed in terms of "habitat effectiveness." Habitat effectiveness can be influenced by a number of factors, such as plant species composition, structural condition (quality), patch size, location (juxtaposition), and the amount of disturbance (caused by people). For this planning effort, the analysis focuses on the effectiveness of habitat that contributes to species of focus⁴. The approach used in this plan is to identify source habitats by general vegetation types and to display habitat effectiveness by alternative as it relates to the amount of influence of open roads and un-fragmented patch size.

Wildlife Emphasis Levels

Common to Alternatives 2 - 7 have objectives for management of wildlife that are included in one of three management emphasis levels – primary, secondary or minor. These objectives and guidelines would be expected to benefit all species of focus (e.g. ungulates, neotropical migratory birds, special status species, etc.). The main techniques used for managing for wildlife under the different emphasis levels include:

- Seasonal closure
- Distance buffers
- Habitat effectiveness
- Motorized travel route densities
- Un-fragmented habitat patch size
- Priority for restoration treatments
- Miscellaneous conditions for use (i.e., group use requirements for recreation, no site occupancy stipulations for mining)

Definitions and guidelines for the different wildlife emphasis area are as follows:

³ A *sink environment* is the composite of all environmental conditions occurring in a specified area and time that results in negative population growth (Wisdom, et. al., 2000).

⁴ Species of focus are vertebrate species for which there is ongoing concern about population or habitat status. We used four criteria to develop the list of species that were the focus of our planning and assessment. For this planning effort species were included if they met any of the following:

[•] Species that are included in the Special Status Species Policy (6840) which includes: federally listed threatened, endangered, proposed or candidate species; Bureau Sensitive, Assessment, or Tracking Species; and State listed species.

Species of local interest, such as deer, elk, pronghorn and golden eagles.

Additionally, some species were selected from the following sources if there was a source habitat that was lacking a species (for coarse-scale analysis) in order to display the effects of the alternatives.

Species that were identified in Source Habitats for Terrestrial Vertebrates of Focus in the Interior Columbia Basin (Wisdom et. al., 2000) and occur in the planning area.

Species the Oregon-Washington Partners In Flight identified as having significant population declines.

Primary wildlife emphasis means wildlife is one of the most important management considerations for an area. Areas allocated to primary emphasis are intended to benefit wildlife and retain high wildlife use by applying one or more of the following guidelines:

- Target habitat effectiveness⁵ for a geographic area at 70 percent or greater;
- Where possible, maintain large, un-fragmented patches (1000 to 2,000 acres);
- Target low densities of open motorized travel routes (≤1.5 mi/mi²)
- Rate as a high priority for habitat restoration treatments.

Secondary wildlife emphasis is where wildlife is one of several resource management programs that are of focus in an area, and typically receive a slightly lower, but still significant, level of management consideration. Areas allocated to a secondary emphasis are intended to support wildlife and maintain a moderate amount of use. The following management guidelines reflect a lower degree of importance than primary emphasis areas:

- Target habitat effectiveness for a geographic area at 50 percent or greater,
- maintain moderate size un-fragmented habitat patches (400 to 800 acres),
- target moderate densities of open motorized travel routes (≤2.5 mi/mi²).

Minor wildlife emphasis occurs where wildlife typically receives a lower level of consideration to most other resource management programs. These areas, as a whole, should still contribute to species occurrence and distribution, but typically are not the focus of intense management efforts for wildlife. Generally, guidelines are tied to minimum legal requirements identified in the sections on "common" guidance (Standards for Rangeland Health, BLM Special Status Species Policy (6840)), and the Threatened and Endangered Species Act.

Alternatives Overview

There are seven alternatives under consideration for the Draft Resource Management Plan. This includes one "No Action/No Change" Alternative, and six "action" alternatives (including the Preferred Alternative) that would reflect various levels of change from continuing the existing Brothers-La Pine Resource Management Plan direction. All alternatives would include continuing direction that is not being revised (Common to All Alternatives). Elements that do not vary between the action alternatives are located in the Common to Alternatives 2 – 7. All of the "action" alternatives make an effort to develop a "balance" of uses, and so it is difficult to characterize them in summary. Generally, none of the alternatives eliminates any one type of use entirely. In many cases, if a use is more limited in one geographic area in a particular alternative, there may be an increase in that use elsewhere in the planning area in the same alternative to try and keep that balance of uses present in each alternative.

⁵ Habitat effectiveness is used as an index to measure the percentage of available habitat that is usable by elk and is used as a guideline for some alternatives. The Habitat Effectiveness Index for Elk on Blue Mountain Winter Ranges developed by Thomas *et al.* (1988) will be used with modifications developed from findings in Rowland *et al.* (2000) to assess effects related to motorized vehicles.

Alternative 1 – No Action/No Change

This section describes the current management direction provided by the existing Resource Management Plans (RMPs) and decisions applicable to the Upper Deschutes Planning area. This alternative includes existing direction for the Millican OHV area from the Millican OHV Environmental Assessment and Millican litigation settlement agreement.

Common to Alternatives 2 through 7

Some changes to the current management would be adopted in Alternatives 2-7. These decisions would reflect elements such as changes in use or management approaches that are consistent across Alternatives 2-7.

Alternative 2

This alternative would have the least amount of overall change from current management. In general, this alternative would continue a mix of uses throughout the planning area, resolving conflicts on a case-by-case basis rather than by separating uses, or applying specific conflict and demand thresholds. Alternative 2 would emphasize providing multiple use in the same areas.

Alternative 3

This alternative increases emphasis on reducing conflicts between human uses and wildlife habitat management objectives, and separating recreational uses. It relies on the use of Areas of Critical Environmental Concern (ACECs) as a management strategy to meet wildlife and other management objectives. This alternative places a greater focus managing for primary or secondary wildlife habitats with a primary or secondary emphasis across the planning area than does Alternative 2.

Alternative 4

Alternative 4 combines the approaches used in Alternatives 2 and 3, and includes more of an emphasis on providing for recreation opportunities (more than Alternative 3, but less than 2) in areas and during seasons when the demand is greatest. This alternative would also place a greater emphasis than Alternative 2 on reducing conflict between land uses and other users or adjacent residents. Recreation uses would be more separated than Alternative 2, but less than Alternative 3, and there would be an emphasis on certain types of recreation over others within geographic subdivisions. ACECs would provide special management objectives that emphasize ecosystem and wildlife habitat management, but these areas would generally be smaller or less frequently distributed across the planning area than in Alternative 3.

Alternative 5

Alternative 5 would utilize the "urban/rural" concept discussed earlier. The emphasis would be to focus reduced or lower conflict activities and higher quality wildlife habitat within the "urban" areas (generally includes most of Deschutes and Jefferson counties). There would be limited use of ACEC direction to protect resources, and more reliance on broad-scale conservation approaches across the planning area.

38

Alternative 6

Alternative 6 takes an approach that, in contrast to Alternative 5, emphasizes the future of effective wildlife habitats outside of the areas most likely to be affected by residential and urban development. This alternative puts less emphasis on reducing conflicts between land uses, recreational users, and residents in the "urban" areas adjacent to residential areas than does Alternative 5. More emphasis is on reduced conflicts between wildlife management objectives and human activities away from residential development areas in the "rural" areas (generally includes most of Crook County).

Alternative 7 (Preferred Alternative)

Alternative 7 is based in part on areas of consensus developed with our Issue Teams. It takes an approach that combines various features of the previous alternatives. It places more of an emphasis on primary and secondary wildlife habitat emphasis areas in the SE or "rural" portion of the planning area in the area of the greatest potential concentrations of species needs, but also allows the opportunity for increased amounts of year-round motorized use in much of that area. It emphasizes more separation of recreational uses than shared uses, and on providing large blocks of contiguous lands relatively equally balanced across the planning area for those separated recreation uses. Alternative 7 would modify the "conflict and demand" threshold criteria used in "Common to Alternatives 2 - 7" to determine areas available for continued grazing use during the life of the plan.

Rationale for the Preferred Alternative

The Preferred Alternative reflects a number of areas of consensus from the collaborative process used to develop this plan. These include:

- Ecosystem Health and Diversity a broad scale conservation approach to management of Old Growth Juniper⁶, and a modified boundary on expanded Peck's Milkvetch ACEC
- Transportation designation of transportation corridors north and south of the City of Redmond
- Land Uses decision matrix developed to evaluate and categorize allotments for
 present and future decisions about continuing grazing within those allotments and
 areas available for salable mineral extraction (tied to expanded Peck's Milkvetch
 ACEC boundary location); and areas and criteria for military training use.
- Recreation motorized use Limited to designated roads and trails
- Land Ownership lands designated for future community expansion (CE), conceptual agreements on configuration of Z-1, Z-2 lands.

The Preferred Alternative builds on areas of consensus identified during the planning effort and reflects a balance of uses that would meet the needs of local communities as well as national mandates for management of public lands. It provides a mix of management emphases that recognizes the individual identities and social and economic values of the local communities. It will meet long term military training needs and provide a flexible framework for managing livestock grazing that responds to changing

⁶ Note there was not consensus that this approach was sufficient to protect this resource, but there was agreement that the broad scale approach met at least a minimum level of protection.

conflicts and demands. The Preferred Alternative would also provide reasonable mitigation for urban and rural residents while still providing for traditional uses like livestock grazing and salable mineral material site development. It would provide for separated motorized and non-motorized recreation uses that are roughly equal across the planning area,⁷ and that offer opportunities in close proximity to urban areas as well as larger blocks of public lands for uses father from urban centers. The Preferred Alternative would integrate recreation and wildlife management objectives throughout the planning area.

The Preferred Alternative also includes elements that support current scientific approaches to ecosystem management and an aggressive approach to management of hazardous fuels in the urban interface. It would establish a proactive framework for managing present and future at-risk significant archeological resources. It would also include an approach for determining future areas available for firearm use integrated with local governments, reduce risk to neighbors, and provide for firearm uses that would complement desired recreation experiences.

Comparing the Alternatives

The alternatives can be compared by examining the key components described below and displayed in Table 2-1, Comparison of Alternatives.

Ecosystem Health and Diversity

- Vegetation condition-the six action alternatives use one of two approaches for vegetation management emphasis. The emphasis is on either restoring the physical extent and structure of vegetation within a historic range of variability (Alternatives 3, 6, and 7) or on improving the structure or condition of vegetation in key areas within its current range (Alternatives 2, 4, and 5). Key differences to these approaches are reflected by the priority, type and amount of expected treatments in certain riparian and upland vegetation types over the life of the plan.
- Wildlife Wildlife Emphasis Levels level (primary, secondary, minor) and allowable uses within and adjacent to important wildlife habitats.
- Areas designated as Special Management Areas (Areas of Critical Environmental Concern, Wilderness Study Areas, Research Natural Areas, and Caves).

⁷ Note that North Millican would continue to be operated under current seasonal and trail density requirements until a site-specific trail development plan that would meet plan objectives was completed.

Land Uses

- Livestock grazing and Minerals Areas available for livestock grazing and salable mineral operations related to the potential for conflict with other uses on public or adjacent private land.
- Forest and range products Differences reflected in the volume available per acre.
- Military uses Areas available for long term or rotational military use.

Recreation

Different recreational opportunities vary by recreation emphasis, type of use, and season of use. These include required travel management designations of Open, Limited, or Closed.

Transportation

Regional transportation corridors would be allocated to meet local and regional needs. The local transportation system would be comprised of collector roads identified as part of the designated long-term road system and local roads available for future designation or closure.

Land Ownership

Different mixes of lands retained in public ownership would be made available to either meet different community needs, or available for trade or sale to further long-term land ownership objectives.

Public Health and Safety

Different areas would be available, closed to firearm discharge, or closed unless legally⁸ hunting. Wildfire management related to campfires is also briefly addressed in this issue area.

Alternatives Considered in Detail

This section contains a summary description of the each of the seven alternatives that are explained in full detail in Appendix A. It includes a description of each alternative in terms of the key management direction and a brief summary of expected outcomes. This section references those elements that are not revised in this plan (see Appendix A -Common to All Alternatives). It includes a brief discussion of the elements that are changes to the existing management direction but do not vary within the "action" alternatives (see also Appendix A, Common to Alternatives 2-7), besides the descriptions of the Alternatives.

For the purposes of this plan, "legally hunting" refers to the seasonally permitted hunting of game. "Hunting" is defined as "To take or attempt to take any wildlife by means involving the use of a weapon or with the assistance of any mammal or bird (ORS 496.004 (10))."

Goals and Management Direction Common to All Alternatives

The following sections summarize the key Goals and Management Direction that have bearing on the alternatives described later in this chapter.

Goals Common to All Alternatives

This section describes general overall Goals for resource management direction. Goals are broad, overarching purposes for which the BLM are mandated to administer public lands. These generally describe the legal basis and management direction provided to the agency by the Laws, BLM policy and Program Direction, and they apply to all alternatives.

Ecosystem Health and Diversity

Restore and support healthy ecosystems in conjunction with vegetation and wildlife habitat needs, riparian conservation strategies, watershed restoration methods, and economic reliance of the population on public lands. Management actions would emphasize ecosystem sustainability and health throughout the planning area, while managing for expected increases in human population and use levels.

The role of fire in the ecosystem would be recognized and the agency would establish resource values at risk categories that provide guidance for fire suppression and fuels treatments, particularly in the wildland urban interface. Periodic fire would be managed to maintain the disturbance cycle.

Land Uses

Manage the land in a manner that recognizes the nation's need for domestic sources of minerals, food, timber, and fiber from the public lands. At the same time, the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resources, and archeological values would be protected. Public lands are preserved and protected in their natural condition, where appropriate; food and habitat for fish and wildlife and domestic animals is provided; and land is available for outdoor recreation and human occupancy and use.

Visual Resources

Identify and protect visual values on public lands, assuring integrating environmental design arts in planning and decision-making.

Recreation

Provide a broad spectrum of resource-dependent recreation opportunities to meet the needs and demands of public land visitors, while ensuring the continued availability of public lands and related waters for a diversity of resource-dependent outdoor recreation opportunities. More intensive visitor management, resource protection, and facility investments are provided where the public has demonstrated its desire to use public lands for outdoor recreation, and outdoor recreation is a high priority.

42

Transportation and Utilities

Provide transportation and access facilities that protect public safety, provide user safety, protect the environment, conserve and protect resources, and enhance to productivity and use of public lands. Identify facilities as part of an approved transportation plan to allow for allocation of construction and maintenance funds; and minimize damage to scenic and esthetic values, fish and wildlife habitat and otherwise protect the environment.

Collaborate with local communities to plan reasonable, safe access to or across public land if necessary, in a manner that serves to protect and conserve sensitive resources and the environment.

Regional Transportation Planning

Develop and maintain functional and efficient regional transportation systems coordinated with State, local and BLM jurisdictions that provide links between local communities by considering land allocation needs for regional transportation corridors in conjunction with multiple resource management.

Local Transportation Planning

Provide reasonable access for recreation, fire, safety and resource management that meet desired conditions for access management.

Land Ownership

Retain public lands in federal ownership, unless disposal or acquisition of a particular parcel would better serve the national interest and the needs of state and local people, including needs for lands for the economy, community expansion, recreation areas, food, fiber, minerals, and fish and wildlife. Changes in public land ownership are considered where consistent with public land management policy and where these changes would result in improved management efficiency.

Withdrawals are used to dedicate public lands to specific uses by protecting specific resource values over the development of lesser values. Lands may be segregated from some or all of the public land laws and/or location and entry under the mining laws. Withdrawals are also used to transfer jurisdiction over an area of Federal land from one department, bureau, or agency to another department, bureau, or agency after alternative realty tools have been considered (such as a rights-of-way reservation) and found inadequate.⁹

Public Health and Safety

The agency provides the public with recreation areas and facilities that are free from recognized hazards insofar as practical, and meets the requirements of BLM Manual H-2111 – 1, 2001: Safety and Health Management in accordance with safety policies and procedures.

Archaeology

Cultural resources are located, protected and preserved in accordance with existing legal authorities.

Departmental Manual 603.1.1 addresses specific guidance to the BLM for managing the withdrawal program that includes making, modifying, and revoking withdrawals. The manual also addresses post withdrawal management objectives and stresses the periodic review of existing withdrawals.

Management Direction Common to All Alternatives

Generally, management direction Common to All Alternatives reflects the baseline management conditions mandated by BLM policy and those portions of the B/LP RMP that are not revised by this RMP, but will be carried forward as management direction under all alternatives and provide an implementation baseline. These have been summarized below under each issue category and in Table 2-1, Comparison of Alternatives, and Appendix C, Management Guidance Continued in This Document. Appendix A provides more detail on this direction as it would appear in the proposed Upper Deschutes RMP.

Ecosystem Health and Diversity

Vegetation

The Standards for Rangeland Health (BLM, 1997) were incorporated into the B/LP RMP and are considered to be the most current primary guidance for ecosystem management and serve to meet the intent of FLPMA and other relevant BLM policy concerning the management of vegetation, wildlife habitat, special status species, watersheds, and water quality.

The BLM would promote healthy sustainable rangeland, woodland, and forest ecosystems and accelerate restoration and improvement of public lands, as directed by the rangeland health regulations (43 CFR 4180). These regulations specify that the BLM shall assure the following:

- Watersheds are in, or are making significant progress toward properly functioning physical condition, including their upland, riparian-wetland, and aquatic components.
- Soil and plant conditions support infiltration, soil moisture storage and the release of
 water that are in balance with climate and landform and maintain or improve water
 quality, water quantity and the timing and duration of flow.
- Ecological processes, including the hydrologic cycle, nutrient cycle and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
- Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM objectives such as meeting wildlife needs.
- Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

Noxious Weeds

Due to the rapid expansion of noxious and other non-native weeds in portions of the planning area, all alternatives would emphasize maintaining noxious weed-free plant communities or restoring plant communities with noxious weed infestations through use of on-going broad-scale integrated weed management strategies. Efforts would also be made to control or manage other undesirable, non-native or invasive species.

Wildlife

Consistent with the requirements of the Endangered Species Act (1973), all alternatives would ensure that actions are consistent with the conservation needs of special status species. They would not contribute to the need to list special status species or jeopardize the continued existence of listed species. Where practical, the BLM would seek opportunities to conserve and improve special status species and habitats for native wildlife in the development of land use plans, activity plans, and in other BLM authorized, funded or approved activities (BLM Manual 6840- Special Status Species Management, Endangered Species Act).

To achieve this objective, the BLM would use habitat modification techniques such as mowing of shrubs, prescribed burning, livestock grazing and commercial and non-commercial cutting of trees to maintain or improve special status species habitat. The agency would also minimize disturbance actions to reduce negative effects to federally listed or proposed species during seasonally sensitive periods (i.e. breeding, nesting, winter roosting, etc.). Actions that could cause a disturbance would generally be managed using either year round or seasonal restrictions, and/or distance buffers. Specific restrictions include, but are not limited to, human activities (such as recreation), range management, timber operations, and mining, which would not be allowed within ½ half mile of active bald eagle nest sites and nearby perches from January 1 to August 31 (see Table 2-2, Seasonal Restriction and Distance Buffers, for a list of other species that have required seasonal restrictions, seasonal restriction dates and distance buffers). Winter roosts would also be managed using seasonal restriction dates.

Table 2-2. General Guidelines¹ for Seasonal Restriction and Distance Buffers

Species	Habitat	Range or Maximum Spatial Buffer	Range of Restriction Dates (may be shorter period0
Bald Eagle	Nest	¼ mile non-line of sight ½ mi line of sight 1.0 mile blasting	January 1 – August 31
	Winter Roosts	½ mile	December 1 – April 1
Golden Eagle	Nest and	¼ to ½ mile	February 1 – August 31
			February 1 – August 31
N. Goshawk	Nest	¼ mile of current nest, or ½ mile of previous year's nest	March 1 – August 31
Cooper's Hawk	Nest	¼ mile	March 1 – August 31
Sharp-shinned Hawk	Nest	¼ mile	March 1 – August 31
Ferruginous Hawk	Nest	½ mi direct line of sight ¼ mi with visual buffer	March 1 – August 1
R.T. Hawk	Nest	¼ mile	March 1 – August 31
Swainson's Hawk	Nest	¼ - ½ mile	April 1 – August 31
Peregrine Falcon	Nest	1.0 mile	January 1 – August 15
Prairie Falcon	Nest	¼ - ½ mile	March 15 – August 15
Osprey	Nest	¼ mile	March 1 – August 31
Burrowing Owl	Nest	¼ mile	March 1 – August 31
Flammulated owl	Nest	¼ mile	April 1 – September 30
Great Gray Owl	Nest	¼ mile	March 1 – July 31
Sage Grouse	Lekking	0.6 mile (660 ft) - 0.25 mile	March 1 st – May 15 * February 15– May 1
Sage Grouse	Nesting/Brooding/Rearing		April 1 – July 31
			June 1- September 30
Sage Grouse	Winter Habitat		November 15 – March 15 *November 1– March 31
Great Blue Heron	Nest	660 ft – ¼ mile	15 March – 15 July
Mule Deer	Winter Range		01 December – 30 April *01 November – 01 May
Rocky Mountain Elk	Winter Range		01 December – 30 April *01December – 01 May
	Calving		May 15 – June 30
Pronghorn	Winter Range		01 December – 30 April *01 November – 01 April
Townsend's Big-eared Bat	Hibernaculum Nursery		November 1 – April 15 April 15 – October 31

^{*} Millican Dates

¹These general guidelines are only examples of typical restrictions. Specific dates and distances may vary depending on the type of action proposed and the local breeding chronology of species or the local weather patterns.

As directed in BLM Manual 6840-Special Status Species Management, all alternatives would take actions that progress toward the conditions indicating attainment of the Fundamentals of Rangeland Health (described in 43 CFR 4180.1) and associated Standards (43 CFR 4180.2). Such actions would include management that restores, protects or enhances habitats to support healthy, productive and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate and landform. The same techniques that apply to special status species habitat modification would also apply to native species habitat restoration or maintenance. A current inventory of wildlife species and resources would facilitate this on-going management and future planning needs, and would include systematic population inventories, as well as monitoring and evaluating known populations and habitats.

Common to All Alternatives would be specific guidance for maintaining and restoring special habitat features that provide unique contributions to a variety of species. These features include, but are not limited to, caves, cliffs, and riparian habitats.

For management direction of Pictograph Cave, some guidelines may vary, but all alternatives would provide seasonal closures during the winter hibernation period to protect Townsend's big-eared bat.

Geographic Areas

Wildlife Emphasis Areas

There are a few areas where wildlife would be managed with a primary emphasis under all alternatives, although the methods to achieve them may vary. These areas include all of Badlands, Horse Ridge and Smith Rock geographic areas and parts of Prineville Reservoir (Wild and Scenic River Corridor and Eagle Rock areas), Steamboat Rock (Wild and Scenic River and WSA), and Tumalo (northern block) geographic areas. These areas together include approximately 70,442 acres (Badlands-29,590 ac.; Horse Ridge-24,766 ac.; Prineville Reservoir-4,684 ac.; Smith Rock-2,110 ac.; Steamboat Rock-5,100 ac.; and Tumalo-4,192 ac.) of wildlife habitats that are well distributed across the planning area, and these areas comprise 17 percent of BLM administered lands within the planning area.

In the geographic areas, habitat modifications, improvements and disturbance actions would be managed with specific attention to the species residing in each area. Key habitat components that would be emphasized would include: winter range, seasonal migration corridors, breeding sites, roosting sites, and foraging habitats and adjacent to raptor nest sites.

Habitat Modification

Vegetative habitats would be maintained or improved by reducing the amount of undesirable native and non-native plant species. Recent and past timber harvest in the La Pine area has increased the amount of grass production (approx. 6800 AUMs) and it is available for livestock grazing on a temporary basis until the timber stands become re-established. Priority allocation of this additional vegetation would be to first meet wildlife and riparian area objectives.

Disturbance Actions

Human activities on BLM administered lands would be managed to maintain functional wildlife migration or travel corridors where these functional habitats exist, given the surrounding land use conditions.

Hydrology

All alternatives would be managed to include measures to protect or restore natural riparian functions¹⁰. Management techniques would maintain or improve current good to excellent streambank stability and riparian vegetative condition. Riparian habitat needs would be considered in developing livestock grazing systems and pasture designs and would be evaluated according to the Fundamentals of Rangeland Health. Soils would also be managed to maintain productivity and to minimize erosion. Under all alternatives, allotments would be evaluated according to the Fundamentals of Rangeland Health to ensure water quality complies with State Standards and achieves, or is making significant progress toward achieving, established BLM objectives.

In addition, in compliance with The "Federal Water Pollution Control Act" (commonly known as the "Clean Water Act" [CWA]) of 1977, as amended, existing water quality would be maintained or enhanced consistent with or exceeding Oregon's water quality management plans. As outlined in the Memorandum of Understanding between the BLM and DEQ (see Appendix), the BLM would comply with the Federal CWA and the State DEQ's program by employing the joint USFS and BLM protocol for addressing CWA section 303(d) listed waters. One goal of the strategy is to address all waters on BLM-administered lands generally within the timeline established by the State of Oregon DEQ. The BLM would take actions relative to 303(d) listed waterbodies in accordance with the protocol as outline in Appendix C (Protocol for 303(d) listed streams). Management practices such as grazing, mining, recreation, timber harvesting, and other forms of vegetation management for restoring and maintaining water quality would be designed for healthy sustainable and functional rangeland ecosystems as described in Standards for Rangeland Health, 1997.

Special Management Areas

Special Management Areas within the Upper Deschutes Plan area include Areas of Critical Environmental Concern (ACEC), Research Natural Areas (RNA), Wilderness Study Areas (WSA), and Caves. Each of these areas has special management direction that reflects the values for which each of these areas or sites are managed. Specific management direction that is provided for Wild and Scenic Rivers and river corridors within the planning area boundary remains in place is provided in the W&SR Plans prepared since the adoption of the B/LP RMP.

Areas of Critical Environmental Concern (ACECs)

ACECs are areas containing specific resources that would benefit from some form of special management. In the Upper Deschutes area, some of the ACECs designated in the past have additional overlying designations. These include two RNAs (which are also ACECs), the Badlands WSA (a portion of which is also an ACEC), and the Chimney Rock segment of the Lower Crooked Wild and Scenic (W&S) River (a portion of which is an ACEC).

In all alternatives, management actions would be designed to not impair the values for which the ACEC was designated. Existing ACECs would be retained where relevance and importance criteria continue to be met, and new ACECs would be designated where special management is required to protect the identified values. Unless specifically addressed in other guidance, uses that do not adversely affect the values for which the ACEC was designated would be allowed to continue.

¹⁰ As defined by Executive Orders 11988 and 11990 and the Oregon-Washington Riparian Plan (1987).

The following areas met the criteria and were designated as ACECs in the B/LP RMP: Badlands, Horse Ridge (RNA), Lower Crooked River, Peck"s Milkvetch, Powell Butte (RNA) and Wagon Roads. Objectives/standards and guidelines vary according to the ACEC; however, actions would be designed to maintain the value(s) for which these ACECs were designated (see B/LP RMP pages 52 – 72 for specific allowable uses and guidelines outlined for each ACEC). Acres shown below for individual ACECs are based on new estimates obtained from GIS technology. A total of approximately 24,543 acres were designated for ACECs in the B/LP RMP and are not changed by this RMP.

Badlands ACEC (16,684 acres)

The values for which this ACEC was designated would be maintained, with all uses contributing toward the attainment of this objective. Specific values include primitive recreation opportunities, geologic formations, a prehistoric river canyon and pictographs, and old-growth juniper woodland.

Horse Ridge ACEC/RNA/ISA (609 acres)

The Horse Ridge ACEC/RNA Natural Area Management Plan (April 1996) established two objectives: 1) To maintain the natural condition of the western juniper/big sagebrush/threadleaf sedge community; and 2) To encourage use of the Natural Area for scientific research and college-level educational opportunities in a manner which will not degrade the natural ecological conditions or processes.

Peck's Milkvetch ACEC (4,073 acres)

The designation of the existing Peck's Milkvetch ACEC (4,073 acres) would be continued to provide conditions that emphasize and protect populations of Peck's milkvetch, a plant listed as Threatened by the State of Oregon. A detailed management plan for the area would be completed, which would specify the management required for Peck's milkvetch.

Livestock grazing would continue to be authorized with implementation of deferred rotation grazing management, allowing grazing only after Peck's milkvetch dormancy at least every other year. Other grazing systems would be allowed if research and monitoring show they would not adversely affect the plant. Prescribed fire, as well as suppression activities, would be allowed, providing restrictions or stipulations were designed to maintain or enhance special values. The ACEC would be consistent with the District's Fire Management Plan.

Mineral development would be allowed providing restrictions or stipulations are designed to maintain or enhance special values. OHV use would also be allowed providing restrictions or stipulations are designed to maintain or enhance special values (e.g., travel limited to designated roads and trails). The collection of rocks (rockhounding) would be allowed but with restrictions/stipulations designed to maintain or enhance special values. Public land within the 1989 boundaries of the ACEC would be retained in Federal ownership.

Firewood harvest would not be allowed. The ACEC is also identified in B/LP RMP (1989) as a right-of-way (ROW) avoidance area. New ROW alignments would be avoided in the area to the extent possible.

Powell Butte ACEC/RNA (510 acres)

No objectives/standards were established through the B/LP RMP. A detailed management plan for the area would be completed which would specify the management required for the plant communities represented by this natural area. In particular, a plan of operation must be submitted and approved before the issuance of any sales contracts or free use permits for mineral materials.

Wagon Roads ACEC (90 acres)

The integrity and interpretive resources of the segment of the historic Huntington Road (Wagon Roads ACEC) located in Township 17, Range 12, Section 1 (see Map 7, Special Management Areas) would continue to be highlighted and protected. This 1.25-mile segment covers 90 acres, including a 300-foot buffer on either side to protect associated historic features.

Common to All Alternatives, livestock grazing would be allowed if consistent with ACEC goals and in accordance with Standards for Rangeland Health and Guidelines for Grazing Management. All forms of non-motorized, primitive recreation would be permitted except for horseback riding and non-motorized vehicle use along the road alignment south of McGrath road. Opportunities for the designation of a pedestrian trail system with interpretive signs would be pursued. OHV use along the historic road south of McGrath Road would not be allowed.

In all alternatives, wildfire would be fought aggressively if fire was within, or threatening the ACEC. Fire lines would not be constructed within the ACEC and surface disturbance would be kept to the minimum amount necessary. Prescribed fire would not be allowed. Rockhounding would not be allowed. New rights-of-way would be discouraged.

Badlands ACEC (16,684 acres)

Designation of the Badlands ACEC) would continue, and management activities would continue to emphasize the values for which this area was designated, including primitive recreation opportunities, geologic formations, a prehistoric river canyon, pictographs and old-growth juniper woodland. While most activities are allowed in the ACEC, mineral leasing is not, Common to All Alternatives.

Research Natural Areas (RNAs)

All alternatives would continue to provide components of the national system of RNAs. The Oregon Natural Heritage Act calls for the establishment of a "discrete and limited system" of natural heritage conservation areas, which have "substantially retained their natural character" and which "represent the full range of Oregon"s natural heritage resources."

Specifically, under Common to All Alternatives, the agency would continue the designation of Horse Ridge (609 acres) and Powell Butte (510 acres) as ACEC/RNAs. Suppression activities would be allowed with restrictions or stipulations designed to maintain or enhance special values. Prescribed natural fire and prescribed fire would be allowed in the Horse Ridge and Powell Butte ACEC/RNAs. OHV use would not be allowed. New road construction and rights-of-way would not be allowed.

For all ACECs, including those additionally designated as RNAs, BLM would improve the availability of public information about these areas. This would include, but not be limited to improved boundary marking, publication of management guidelines and reasons for designation, and a general increase in public awareness.

Horse Ridge ACEC/RNA

Livestock grazing would not be allowed within the Horse Ridge ACEC/RNA. The Horse Ridge ACEC/RNA area is withdrawn from locatable mineral entry under the 1872 mining laws. Surface occupancy for fluid mineral leasing would not be allowed. Geophysical exploration would be restricted protect the natural values for which the RNA was designated. Rockhounding would not be allowed.

Powell Butte RNA

Plans of operation must be submitted and approved prior to any development of mining claims in the Powell Butte RNA. Approved plans of operation would have stipulations to

protect the values of this RNA. Surface occupancy for fluid mineral leasing would not be allowed. Geophysical exploration would also be restricted protect the natural values for which the RNA was designated. Rockhounding would not be allowed.

Wilderness Study Areas

Under all alternatives, WSAs and Instant Study Areas (ISAs; i.e., Horse Ridge ACEC/RNA) would be managed to maintain wilderness suitability consistent with the 1995 "Interim Management Policy for Lands under Wilderness Review" (B/LP RMP).

All WSAs and ISAs would be closed to mineral leasing. Plans of operations must be submitted prior to the development of any mining claims. Approved plans of operation must meet the non-impairment standard of the IMP. Geophysical exploration would also be restricted to protect wilderness suitability.

Any inholdings that are acquired within a WSA/ISA would be managed in a manner similar to the surrounding WSA/ISA.

Any WSA/ISA released from wilderness study via legislation and not designated as wilderness would no longer be subject to the IMP, and would be managed under general BLM management policies and applicable use plans. For a majority of the Badlands WSA, this would include the Badlands ACEC management policy. For the majority of the Steelhead Falls WSA, this would include the Middle Deschutes Wild and Scenic River Management Plan policy.

Caves

Caves nominated for significance or determined significant would be managed with an emphasis on educational, research, and protection of cave resources. Under all alternatives, activities and use would be managed to not impair the nominated values for which the cave may be determined significant.

Nominated caves within the planning area determined to be Significant under the FCRPA (with the year of determination) are included in Appendix A.

All remaining caves that have been nominated for Significant cave status will be reviewed, and a determination made whether or not they qualify as a significant cave (see Appendix A for lists of allowable and prohibited activities).

Land Uses

Livestock Grazing

All alternatives would provide for continued livestock grazing, while reducing conflicts with and meeting needs of other uses and resources.

Per 43 CFR 4180.2, where livestock grazing is found to be a significant factor in not achieving Standards for Rangeland Health, actions to control intensity, duration, and timing of grazing and/or provide for periodic deferment and/or exclusion would be required to meet physiological requirements of key plant species and to meet other resource objectives. Upon determining that existing grazing management practices on public land are significantly contributing to the nonattainment of resource objectives, appropriate actions would be implemented.

The intent of grazing management is to leave sufficient herbaceous material in most areas, to provide soil and watershed protection, to provide forage and cover for wildlife, maintain or improve forage quality for livestock and wildlife, and to meet other resource objectives. The current grazing systems (Appendix G) would be maintained until analysis or evaluation of monitoring data or rangeland health assessments identify, or

other events (such as livestock operational changes) dictate a need for adjustments to meet objectives. Applicable activity plans (including existing allotment management plans, agreements, decisions and/or terms and conditions of grazing use authorizations) would be revised and implemented to ensure that resource objectives are being met.

The level of AUMs of specified grazing use in the alternatives is based on the average authorized AUMs using the years 1990, 1995, and 2000, compared to active preference AUMs. However, livestock permittees have the option to license up to their full active preference (displayed in Appendix G) for any given year. Total active preference for the planning area is 38,726 AUMs under B/LP RMP direction (or 22,612 AUMs under the current situation; see further explanation in Chapter 4). Permittees seldom use their full active preference for a variety of reasons, including previous agreements with BLM, management prescriptions in implemented AMPs, economic factors, and forage and water availability.

All areas currently closed to livestock grazing would stay closed.

Allotment Evaluation and Management

Monitoring studies and allotment evaluations will be done on a schedule as outlined in the Oregon Rangeland Monitoring Handbook (H-1734-2). Current direction is to perform an allotment evaluation every 5 years for I category allotments and every 10 years for M category allotments (see description of allotment categorization process in Chapter 3). The C category allotments will be monitored and evaluated as needed.

Monitoring studies include recording actual use; forage utilization; soil stability; trends in vegetative density, cover, and composition; and ecological site inventory data. During allotment evaluations, interdisciplinary teams review monitoring information and examine and propose changes to allotment goals, forage allocation, allotment category, and grazing systems.

In 1997, the Standards for Rangeland Health and Guidelines for Grazing Management (BLM 1997) were adopted by the BLM and incorporated into existing plans. The Standards meet the intent of 43 CFR 4180 (rangeland health regulations), which contain the objectives to "...promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions... and to provide for the sustainability of the western livestock industry and communities that are dependent upon healthy, productive public rangelands."

The Standards are the basis for assessing and monitoring rangeland conditions and trend. The assessments evaluate the standards and are conducted by an interdisciplinary team with participation from permittees and other interested parties. The complete "Standards for Rangeland Health and Guidelines for Livestock Grazing Management" can be found at http://www.or.blm.gov/Resources/Rangelands/s-gfinal.htm.

Based on 43 CFR 4180.2, if livestock are significantly contributing to the nonattainment of a standard, or management does not conform with the guidelines, as soon as practical but not later than the start of the next grazing season, management will be implemented to ensure that significant progress is being made toward attainment of the standard(s), and/or conformance with the guidelines.

The Prineville District BLM expects to complete rangeland health assessments (per direction in 43 CFR 4180 and Standards for Rangeland Health) on all District allotments by 2008.

Allotment Management Plans (AMPs) are sometimes developed for larger I or M category allotments. An AMP prescribes the manner and extent that livestock grazing

is conducted to meet multiple use, sustained yield, economic, and other objectives. A grazing system is generally incorporated into the plan. An AMP is implemented when it is incorporated into the permit and accepted by the permittee, and is operational when supporting range improvements and the grazing system have been initiated.

Rangeland Developments

Rangeland developments are proposed as part of the allotment evaluation process, and as a result of other reviews, to assist in attaining resource management goals. Various rangeland developments have been implemented to provide livestock forage, improve livestock distribution, improve rangeland health, improve soil stability, improve wildlife habitats, improve wildlife/livestock forage, and to restrict livestock from certain areas. As mandated in FLPMA and PRIA, a portion of the grazing fees is invested in range developments with the expectation that these projects may benefit wildlife, watersheds, and livestock producers. Livestock operators, state and Federal agencies, and other interested public entities have continued to fund rangeland improvement construction.

Minerals

Under all alternatives, leasable, saleable and locatable mineral prospecting, exploration, and development on BLM administered lands would be allowed, while protecting other land values. Public lands open to mineral uses may be explored and developed for mineral resources in accordance with the 43 CFR 3000 through 3800:

- Where not withdrawn from mineral entry or under discretionary closure;
- In a manner that would not cause unnecessary or undue degradation of the landscape;
 and
- In a manner consistent with applicable land use plans and Federal and state laws with respect to 1) air and water quality, 2) noise, 3) solid and liquid waste disposal, 4) fisheries, wildlife, and plant habitat, and 5) cultural and paleontological resources.

All alternatives would also allow for the following activities:

- 396,185 acres are available for locatable mineral entry under the 1872 mining laws.
- 366,640 acres are available for mineral leasing.
- All surface disturbances on to mineral operations, including disturbances resulting from casual use and operations under a notice or plan must be reclaimed. Reclamation shall include but is not limited to:
 - 1. Saving of topsoil for final application after reshaping of disturbed areas has been completed;
 - 2. Measures to control erosion, landslides, and water runoff, and the spread of noxious weeds:
 - 3. Measures to isolate, remove, or control toxic materials;
 - 4. Reshaping of the area disturbed, application of the topsoil, and re-vegetation of the disturbed areas, where reasonably practical; and
 - 5. Rehabilitation of fisheries and wildlife habitat.
- Surface occupancy for fluid mineral leasing is not allowed on 16,480 acres surrounding Prineville Reservoir.
- All reserved federal mineral estate (federally owned minerals in non-federally owned lands) would remain open to mineral exploration and development.

Coal, coal bed methane, oil shale, and tar sands are considered absent from the planning area, and are not addressed in this RMP.

Public lands would be made available for recreational rock collecting consistent with the FLMPA requirements for outdoor recreation opportunities while protecting the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water, and archeological values; preserving and protecting public lands in their natural condition, where appropriate; and providing food and habitat for fish, wildlife, and domestic animals. The collection of rocks, invertebrate fossils and mineral specimens including petrified wood would be allowed in reasonable amounts for non-commercial use only. Collection of petrified wood without charge is restricted to 25 pounds plus one piece per person per day and may not exceed 250 pounds per year. Quotas from multiple persons would not be allowed to be pooled to remove pieces larger than 250 pounds. No petrified wood specimen weighing more than 250 pounds shall be removed without a permit from the authorized officer, and no person shall use explosives or mechanical devices (except metal detectors) to aid in the collection of rock materials.

The North Ochoco Reservoir, Eagle Rock, and the portion of the Fischer Canyon site east of Highway 27 would continue to be managed for rockhounding uses.

Forest Products

In accordance with FLPMA, forests and woodlands would be managed to provide for social and economic values, including wood products, consistent with ecosystem sustainability and management objectives.

Approximately 41,110 acres of commercial forestland in the La Pine block and approximately 1,080 acres of commercial forestland in the northern area would be managed in a sustainable manner to ensure the availability of forest products in perpetuity for social/economic needs. The harvest of up to 2,000 cords of firewood and other wood products from the approximately 170,000 acres of juniper woodlands within the planning area would be allowed.

As a condition of the conveyance of 1,768 acres within La Pine State Park to the Oregon Parks and Recreation Department, BLM retained title to all present and future vegetative resources on these parcels. To this end, vegetation management actions would be designed to help the goals and objectives of the Oregon Parks and Recreation Department.

Military Uses

In agreement with the Oregon Military Department, all alternatives would ensure consistency of planned and approved activities with environmental requirements, integrated resource management plans, and conflict resolution with neighbors on public lands authorized for long-term and short-term military use.

Visual Resources

VRM Class designations will be made for the planning area and will be used to evaluate the visual resource impact of all surface disturbing projects. For all alternatives, the Badlands WSA, Steelhead Falls WSA, and the Horse Ridge ACEC/RNA/ISA are designated as VRM Class 1 (see Appendix H for definition of VRM Classes).

Recreation

Motorized and non-motorized recreation would be managed to provide visitor satisfaction, protect natural resources, provide visitor safety, and minimize conflicts among various users and neighbors.

There are relatively few areas of common travel management designations for all alternatives (including the no-action alternative). This is partially due to the lack of Open designations in the action alternatives, and also due to the differences in Limited designations made in the B/LP RMP versus those made in the UDRMP (e.g., new seasonal or type of vehicle limitations). The travel management designations that are common to all alternatives include:

- A. Areas designated as Limited (i.e., use limited to designated trails and/or roads, use limited seasonally, etc.) including portions of Cline Buttes, North Millican, and the Sanford Creek area south of Prineville Reservoir are designated as Limited throughout all alternatives. However, there are important distinctions between some of the alternatives on the types of limitations applied to these areas so these areas are not managed in a common manner throughout all alternatives.
- B. Areas designated as Closed to motor vehicles including, but not limited to, BLM administered lands adjacent to Smith Rock State Park; lands atop Powell Butte; several small parcels near urban areas, including Redmond Caves (Redmond), Barnes Butte (Prineville), and the airport allotment and Rickard Road areas (Bend); the Horse Ridge ACEC/RNA; and several parcels located along the Middle Deschutes River southwest of Redmond.

Other elements Common to All Alternatives:

- The BLM would continue to pursue a cooperative agreement to manage the area known as the ODOT pit. If acquired, the BLM would develop the site as a permanent casual-use staging area, and the hillclimb areas behind the play area would be closed, but the play area itself would be Open year-round.
- Roads and other areas in the area known as the Cinder Pit would be managed as follows:
 - 1. One casual use staging area would be developed in the North Area at the cinder pit. This staging area would have a graveled parking area, loading ramp, and an information bulletin board.
 - 2. A warm-up area would be developed at the cinder pit. The area would consist of about a 35-acre area, with ten acres fenced and signed, primarily for use by children.
 - 3. The hillclimb area at the cinder pit would be maintained.
- Roads and/or trails located on private property that is acquired through exchanges, sales, or acquisition of easements would be evaluated for addition to the road and trail system. Priority would be given to roads that provide key linkages or provide loop opportunities, or roads and trails that would replace other routes with resource or safety concerns.
- An event staging area, the West Butte Road Staging Area, would be developed; and a staging and warm-up area near or at 4-Corners would be developed.

Special Recreation Permits and R&PP Leases

All alternatives would provide opportunities for recreation services to be provided by others on BLM administered lands. Special Recreation Permits would be required for all commercial and competitive uses on public lands. All alternatives would allow for R&PP (Recreation and Public Purposes Act) leases to provide for recreation opportunities managed by others (e.g., shooting ranges), and would provide for rockhounding opportunities, by managing specific areas for rockhounding use (see Minerals, Rockhounding for details).

Transportation and Utilities

Current BLM direction for management of transportation systems and other rights-of-way continues to be substantially represented in the B/LP RMP, and is carried forward under all alternatives. Pertinent direction related to regional and local transportation systems and other rights-of-way is summarized below.

All alternatives would continue to emphasize identifying and designating transportation systems, utility corridors, or other rights-of-way to minimize environmental impacts, and consolidate uses wherever possible. Areas within runway protection zones of existing airports are identified and uses and developments within those areas on BLM administered lands are allowed if they are suitable to preserve the clearance needs. Areas of Critical Environmental Concern, Wilderness Study Areas and Congressionally Designated Areas are exclusion areas for new developments, and sites with known special status species plant or animal species, cultural resources, or sensitive visual resources are avoidance areas that may require special mitigation measures. Anticipated future regional utility corridor needs identified in B/LP RMP continue to be represented by maintaining a "Western Regional Utility potential corridor" designation within the planning area if they have not been developed since 1989.

Land Ownership

Under all alternatives, lands would be identified for retention (having high resource values); retention but able to be disposed of through exchange for lands with higher public values; and disposal (do not provide substantial public or tribal benefit).

Lands for retention, including those public lands in Wild and Scenic River areas, identified for retention in the Middle Deschutes/Lower Crooked River (Chimney Rock Segment) Management Plan and designated in the Brothers/La Pine Resource Management Plan would remain Z-1,¹¹ and all habitat essential for the survival and recovery of any federally listed or proposed species or BLM sensitive species, including historic habitat that has retained its potential to sustain listed species and is deemed to be essential for species survival (BLM Manual 6840- Special Status Species Management). Trading of land to acquire habitats of equal or better in value would also be considered.

All lands selected for disposal in B/LP RMP would continue as Z-3 and qualify for the purposes of BACA. These lands include isolated parcels between Bend and Redmond, isolated parcels around Prineville, and isolated parcels northwest of La Pine. ¹²

All alternatives would emphasize providing land for community needs and uses consistent with public land management mandates. In addition, the agency could use easements to compliment acquisitions, in lieu of acquisition for conservation or access as appropriate to further public management objectives (see also Appendix D for Lands Classified as Disposal, Withdrawal, and Acquisition). All withdrawals would continue as displayed in Map 1.

All withdrawals affecting the planning unit would be reviewed periodically to insure the lands being utilized are consistent with the purpose for which the lands were withdrawn. Lands found suitable for return to the public domain shall be restored to entry and managed according to management prescriptions for lands having similar resource values. All new withdrawal proposals would be considered on a case-by-case basis, including land use needs of other Federal agencies.

¹¹ Early in the process these public lands were placed outside the scope because they had more recent plans that met Congressional mandates. However, specific acquisition parcels were not identified in the river plans, and have, consequently, been identified in this plan.

¹² Under BACA, the money derived from the sale of qualifying public lands may be made available to purchase private lands in the same area.

Public Health and Safety

The B/LP RMP does not address the issue of firearms within the planning area, although it acknowledges that hunting occurs throughout the planning area. Subsequent Federal Register firearm closures have been established to protect wildlife resources and other natural and cultural features, reduce vandalism, and to improve public safety. These closures include closures for raptor nesting seasons at Badlands Rock and Fryrear Road, and high use closures at Rosland OHV area and Mayfield Pond.

Archaeology

In compliance with The Archaeological Resources Protection Act, as amended, and the National Historic Preservation Act (NHPA), as amended, all alternatives would emphasize locating, protecting and preserving archaeological resources in accordance with existing legal authorities and policies, with a special emphasis on "At-Risk" significant archaeological resources.

Alternative 1

The Brothers/La Pine Resource Management Plan (ROD 1989) describes in general terms how resources will be managed, the order in which projects will be implemented, and what support will be needed to manage those resources. In general, this plan provides a broad framework for multiple use public land management and makes land use allocations, establishes production goals and protects valuable resources.

While the Upper Deschutes Management Plan expresses desired outcomes and/or desired conditions in terms of goals, objectives and guidelines, this format was not originally used in the B/LP RMP. Alternative 1 retains the original design used in the B/LP RMP and describes general management directions, rather than specific objectives and guidelines. These format changes make it difficult to compare Alternative 1 to any of the alternatives.

This is direction that would be changed or eliminated from the action alternatives (CT 2 -7, individual alternatives). Unless specifically stated, rationale for direction described in Alternative 1 can be found in the B/LP RMP. Additional rationale, when necessary, will be listed in this alternative. This alternative also assumes inclusion of all elements listed in the Common to All section.

Ecosystem Health and Diversity

The B/LP RMP addresses most vegetation issues from the perspective of land treatments. Management direction allows a variety of vegetation manipulation techniques, by habitat type, to improve the ecological condition of the land in the long-term. Habitat-specific vegetation guidelines are listed under each sub-issue heading described below.

For wildlife, two of the overall goals of the B/LP RMP are to provide for commodity production while protecting natural values, and to provide optimum habitat diversity for game and non-game wildlife species. In addition, the B/LP RMP proposes to meet ODFW management objective numbers for deer and elk in the planning area. Specific management direction and guidelines can be found under the headings below.

Management actions within riparian areas would include measures to protect or restore natural functions, and would maintain or improve current good to excellent streambank stability and riparian vegetative condition.

Vegetation

Ecosystem Maintenance and Restoration

See "Land Treatment" pages 88 – 90 in the B/LP RMP.

Special Status Plants

Management direction includes allowing activities that would benefit special status species through habitat improvement, and prohibiting actions that would not meet "no effect" criteria.

Noxious Weeds

Management direction for the control of noxious weeds was limited in the B/LPRMP pending direction from the proposed "Vegetation Management on BLM Lands in the 13 Western States Environmental Impact Statement." However, management direction stressed controlling the weed infestations already present on public lands, and using a variety of control methods including grazing management, chemical/mechanical treatments, and thermal or biological methods to achieve this goal.

Shrub-Steppe

While the B/LP RMP did not specifically address shrub-steppe habitat, guidelines for this type of vegetation include using techniques like spraying and burning to control shrubs, and conducting shrub control treatments only after an allotment assessment has been completed. See "Juniper and Shrub Control" (pages 88-89, B/LP RMP 1989) for a complete description of shrub control methods and specific guidelines. In addition, refer to "Brush Control" and "Standard Operating Procedures" for direction for additional vegetation management guidelines.

Western Juniper

See "Juniper and Shrub Control" (pages 88-89, B/LP RMP, 1989) for a complete description of juniper control methods and specific guidelines.

Lodgepole and Ponderosa Pine Forests

Land Uses---Forest Products, below.

Soil Productivity

Soils would be managed to maintain productivity and minimize erosion. Disturbed soil would be rehabilitated to blend into the surrounding soil surface and reseeded as necessary.

Wildlife

Wildlife Habitat

The primary management direction is to protect or improve important wildlife habitat offering food, water and shelter during all seasons of the year. In addition, management actions should protect, maintain or enhance the habitat of special status animal species.

- Approximately 160,627 acres (40% of plan area) would be managed at a level similar to primary emphasis; 55,618 acres/(15%) at a level similar to a secondary emphasis; and 187,075 acres/(46%) at a level similar to a minor emphasis (see Table 2, Wildlife Emphasis Areas, Alternative 1 and Tables 2-5 to 2-11 for further detail).
- Habitat management plans would be written for high priority wildlife habitats (such as bald eagles and sage grouse). These plans would detail how those habitats would be improved or maintained.

- "Agricultural use of public land could be authorized if the use does not conflict with riparian area management; important wildlife habitat ...and the use would maintain or enhance...all habitat requirements for game and non-game species" (B/LP RMP, p.29).
- Recreational activities that involve motorized vehicles driving off roads and trails could occur as long as they do not create significant adverse impacts to resource values, and this includes all of the La Pine area. Public lands where significant damage to soils, vegetation, wildlife, or visual qualities would either be limited or closed (see B/LP RMP Map 18, Wildlife Habitat, pages 94-95, for acreages).

Special Status Species

Management activities in the habitat of listed or candidate threatened or endangered and sensitive species would be designed specifically to benefit those species through habitat improvement (see B/LP RMP, p. 122 for additional guidelines and consultation recommendations):

- Maintain or improve habitats of other naturally occurring or locally important species. Provide adequate habitat conservation measures for both vegetation altering and disturbance related activities (see B/LP RMP (p. 92-97) for specific deer, elk and pronghorn management objective numbers).
- No land tenure adjustments, programs or other activities would be permitted in the
 habitat of listed or candidate threatened or endangered species that would jeopardize
 the continued existence of such species. All land tenure adjustments must consider
 habitats for threatened, endangered and sensitive species; important deer, elk and
 pronghorn seasonal habitats; nesting and breeding habitats for all wildlife; and
 riparian habitat.
- The anticipated long-term forage available to wildlife in the Brothers area would accommodate ODFW proposed population increases of 27 percent for deer, 23 percent for pronghorn and 71 percent for elk based on 1980 population counts.
- The grazing systems implemented in deer and pronghorn winter range are to improve or maintain habitat conditions on 97 percent of the crucial deer winter range and 95 percent of the crucial pronghorn winter range based on 1982 conditions (B/LP RMP p. 97).
- In crucial wildlife habitat (winter ranges, fawning/calving areas, sage grouse nest areas, etc.), construction work would be scheduled during the appropriate season to avoid or minimize disturbances. In addition, wildlife needs would govern the size and design of the projects (B/LP RMP, p. 90).
- The Millican Off-Road Vehicle Area would be managed in accordance with the interim court decision (1999), where there are seasonal closures and limited motorized vehicle access to protect wildlife (in particular, deer, elk, pronghorn and sage grouse winter habitat).
- All new fences would be built to standard Bureau wildlife specifications to allow wildlife passage and existing fences would be modified as appropriate (B/LP RMP, p. 97).

Table 2-4. Wildlife Emphasis Summary

Wildlife Emphasis Areas - Alternative 1

	Primary Percent/# acres	Secondary Percent/# acres	Minor Percent/# acres	Totals Percent/# acres
All Wildlife Emphasis Areas	40% / 160,627 ac.	14% / 55,618 ac.	46% / 187,075 ac.	100% / 403,320 ac.
Golden Eagles	41% / 16,203 ac.	00% / 00 ac.	59% / 23,764 ac.	100% / 39,967 ac.
Sage Grouse	100% / 77,600 ac.	00% / 00 ac.	00% / 00 ac.	100% / 77,600 ac.
Elk	48% / 86,568 ac.	00% / 00 ac.	52% / 93,604 ac.	100% / 180,170 ac.
Deer	60% / 158,736 ac.	08% / 19,726 ac.	32% / 85,046 ac.	100% / 263,508 ac.
Pronghorn	39% / 65,195 ac.	< 01% / 38 ac.	61% / 101,945 ac.	100% / 167,180 ac.
Migration and Connectivity	51% / 35,944 ac.	16% / 11,118 ac.	33% / 22,878 ac.	100% / 69,940 ac.

Table 2-5. Wildlife Emphasis Areas - Alternative 1 - Mule Deer.

TOTAL	Minor acres/%	Secondary acres/%	Primary acres/%	Geographical Area
29590	0	0	29590	Badlands
	0.00%	0.00%	100.00%	
15267	15267	0	0	Cline Buttes
	100.00%	0.00%	0.00%	
24769	0	0	24769	Horse Ridge
	0.00%	0.00%	100.00%	
1589	1589	0	0	Mayfield
	100.00%	0.00%	0.00%	
52683	32957	19726	0	Millican Plateau
	62.56%	37.44%	0.00%	
53766	0	0	53766	North Millican
	0.00%	0.00%	100.00%	
8815	6142	0	2673	Prineville
	69.68%	0.00%	30.32%	
39475	20494	0	18981	Prineville Reservoir
	51.92%	0.00%	48.08%	
2110	0	0	2110	Smith Rock
	0.00%	0.00%	100.00%	
17555	0	0	17555	South Millican
	0.00%	0.00%	100.00%	
6745	6745	0	0	Northwest
	100.00%	0.00%	0.00%	
5352	252	0	5100	Steamboat Rock
	4.71%	0.00%	95.29%	
5792	1600	0	4192	Tumalo
	27.62%	0.00%	72.38%	
263508	85046	19726	158736	TOTAL
	32.27%	7.49 %	60.24 %	

Table 2-6. Wildlife Emphasis Areas - Alternative 1 - Rocky Mountain Elk.

Geographical Area	Primary acres/%	Secondary acres/%	Minor acres/%	TOTAL
Badlands	29615	0	0	29615
	100.00%	0.00%	0.00%	
Bend/Redmond	0	0	0	0
Cline Buttes	0	0	29,157	29,157
	0.00%	0.00%	100.00%	
Horse Ridge	5484	0	0	5484
· ·	100.00%	0.00%	0.00%	
Lapine	0	0	30708	30708
-	0.00%	0.00%	100.00%	
Mayfield	0	0	439	439
·	0.00%	0.00%	100.00%	
Millican Plateau	0	0	15105	15105
	0.00%	0.00%	100.00%	
North Millican	34673	0	0	34673
	100.00%	0.00%	0.00%	
Prineville	0	0	939	939
	0.00%	0.00%	100.00%	
Prineville Reservoir	8320	0	3374	11694
	71.15%	0.00%	28.85%	
Smith Rock	0	0	0	0
	0	0	0	
South Millican	0	0	4834	4834
	0.00%	0.00%	100.00%	
Northwest	0	0	6745	6745
	0.00%	0.00%	100.00%	
Steamboat Rock	4284	0	687	4971
	86.18%	0.00%	13.82%	
Tumalo	4192	0	1616	5808
	72.18%	0.00%	27.82%	
TOTAL	86,568	0	93,604	180172
	$\boldsymbol{48.05\%}$	0.00%	51.95 %	

Table 2-7. Wildlife Emphasis Areas - Alternative 1 - Golden Eagle.

TOTAL	Minor acres/%	Secondary acres/%	Primary acres/%	Geographical Area Badlands	
0	0	0	0		
	0	0	0		
128	128	0	0	Bend/Redmond	
	100.00%	0.00%	0.00%		
5,404	3,719	0	1,685	Cline Buttes	
	68.82%	0.00%	31.18%		
2159	1657	0	502	Horse Ridge	
	76.75%	0.00%	23.25%		
C	0	0	0	Lapine	
	0	0	0		
C	0	0	0	Mayfield	
	0	0	0		
9505	8527	0	978	Millican Plateau	
	89.71%	0.00%	10.29%		
4861	2194	0	2667	North Millican	
	45.13%	0.00%	54.87%		
1929	1333	0	596	Prineville	
	69.10%	0.00%	30.90%		
7061	3427	0	3634	Prineville Reservoir	
	48.53%	0.00%	51.47%		
997	769	0	228	Smith Rock	
	77.13%	0.00%	22.87%		
513	513	0	0	South Millican	
	100.00%	0.00%	0.00%		
1038	0	0	1038	Northwest	
	0.00%	0.00%	100.00%		
4304	354	0	3950	Steamboat Rock	
	8.22%	0.00%	91.78%		
2068	1143	0	925	Tumalo	
	55.27%	0.00%	44.73%		
39967	23,764	0	16,203	TOTAL	
	59.46 %	0.00%	40.54 %		

Table 2-8. Wildlife Emphasis Areas - Alternative 1 - Pronghorn.

Geographical Area	Primary acres/%	Secondary acres/%	Minor acres/%	TOTAL
Badlands	9379	0	0	9379
	100.00%	0.00%	0.00%	
Bend/Redmond	0	0	25948	25948
	0.00%	0.00%	100.00%	
Horse Ridge	19385	0	0	19385
	100.00%	0.00%	0.00%	
Mayfield	19090	38	5561	24689
	77.32%	0.15%	22.52%	
Millican Plateau	0	0	41235	41235
	0.00%	0.00%	100.00%	
North Millican	0	0	24519	24519
	0.00%	0.00%	100.00%	
Prineville	0	0	3130	3130
	0.00%	0.00%	100.00%	
Prineville Reservoir	0	0	1552	1552
	0.00%	0.00%	100.00%	
Smith Rock	0	0	0	0
	0	0	0	
South Millican	17341	0	0	17341
	100.00%	0.00%	0.00%	
Northwest	0	0	0	0
	0	0	0	
Steamboat Rock	0	0	0	0
	0	0	0	
Tumalo	0	0	0	0
	0		0	
TOTAL	65195	38	101945	167178
	39.00%	0.02%	60.98%	

Table 2-9. Wildlife Emphasis Areas - Alternative 1 - Migration and Connectivity Corridors.

Geographical Area	Species	Primary acres/%	Secondary acres/%	Minor acres/%	TOTAL
La Pine	Deer	33657	0	6986	40643
		83%	0%	17%	
Badlands	Pronghorn	1777	11.8	1	1789.8
		99%	1%	0%	
Mayfield Pond	Pronghorn	0	0	4911.4	4911.4
		0%	0%	100%	
Millican Plateau	Pronghorn	0	0	9856.5	9856.5
		0%	0%	100%	
North Millican	Pronghorn	0	4039	0	4039
		0%	100%	0%	
Research Natural Area	Pronghorn	510	0	0	510
		100%	0%	0%	
Subtotals for Pronghorn		2287	4050.8	14768.9	21106.7
		11%	19 %	70 %	
Prineville	Elk	0	67.5	0	67.5
		0%	100%	0%	
Prineville Reservoir	Elk	0	7000	1122.6	8122.6
		0%	86%	14%	
Subtotals for Elk		0	7067.5	1122.6	8190.1
		0%	86%	14%	
Grand Totals for All Species		35944	11118.3	22877.5	69939.8
1		51 %	16%	33%	

Table 2-10. Wildlife Emphasis Areas - Alternative 1 - All Species' Habitats.

Geographical Area	Primary acres/%	Secondary acres/%	Minor acres/%	TOTAL
Badlands	29615	0	0	29615
	100.00%	0.00%	0.00%	
Bend/Redmond	0	0	42146	42146
	0.00%	0.00%	100.00%	
Cline Buttes	0	0	31,864	31,864
	0.00%	0.00%	100.00%	
Horse Ridge	25167	0	0	25167
	100.00%	0.00%	0.00%	
Lapine	0	33588	7603	41191
	0.00%	81.54%	18.46%	
Mayfield	841	6784	19383	27008
-	3.11%	25.12%	71.77%	
Millican Plateau	0	15246	41037	56283
	0.00%	27.09%	72.91%	
North Millican	54252	0	0	54252
	100.00%	0.00%	0.00%	
Prineville	2673	0	9189	11862
	22.53%	0.00%	77.47%	
Prineville Reservoir	18981	0	20494	39475
	48.08%	0.00%	51.92%	
Smith Rock	2119	0	0	2119
	100.00%	0.00%	0.00%	
South Millican	17687	0	0	17687
	100.00%	0.00%	0.00%	
Northwest	0	0	6745	6745
	0.00%	0.00%	100.00%	-
Steamboat Rock	5100	0	6998	12098
	42.16%	0.00%	57.84%	12070
Tumalo	4192	0	1616	5808
	72.18%	0.00%	27.82%	2000
TOTAL	160,627	55,618	187,075	403320

Hydrology

Riparian

Riparian habitat needs would be considered in developing livestock grazing systems and pasture designs. Riparian areas in the Brothers portion would continue to be protected and managed to provide full vegetative potential. Riparian vegetation in the Brothers portion would be expected to improve on 75 percent of the stream riparian habitats.

• Livestock exclusion or restricted use along 46 miles of stream, 55 miles of stream stabilization, 620 stream structures and 15 acres of debris removal would improve fish habitat. Where fencing is not feasible, livestock use would be managed to achieve 60 percent of vegetative potential within 20 years.

Water Quality

Existing water quality would be maintained or enhanced consistent with or exceeding Oregon's water quality management plans. Allotments would be evaluated according to the Fundamentals of Rangeland Health to ensure water quality complies with state standards and achieves, or is making significant progress toward achieving, established BLM objectives.

- The BLM will meet the Federal CWA and the State DEQ's program by employing the joint USFS and BLM protocol for addressing CWA section 303(d) listed waters. One goal of the strategy is to address all waters on BLM-administered lands generally within the timeline established by the State of Oregon DEQ. The BLM will take actions relative to 303(d) listed waterbodies in accordance with the protocol as outline in Appendix C (Protocol for 303(d) listed streams).
- Livestock exclusion in the same area described in the riparian area above would maintain or improve water quality.

Watershed/Hydrologic Function

Soils would be managed to maintain productivity and to minimize erosion. Allotments would be evaluated according to the Fundamentals of Rangeland Health to ensure water quality complies with State Standards and achieves, or is making significant progress toward achieving, established BLM objectives.

Livestock grazing would be modified where the standard for watershed function is not being achieved, or where measurable progress is not being made toward achieving the standard.

Fire/Fuels Management

The Brothers/La Pine planning area was evaluated for damage to resource values by fire. Values at risk classes have been determined for the planning area and range from the lowest values at risk (Class 1) to the highest values at risk (Class 6, special consideration values at risk). Values at risk are the basis for determining fire suppression action. In addition, the Bear Creek Fire Use Plan (1983) provides for conditional suppression actions on approximately 107,000 acres in the Bear Creek Watershed.

Low-Moderate Risk Classes

Alternative 1 would allow for prescribed fire¹³ to manage vegetation and habitat in low-moderate risk classes (1-3). The Interim Management Policy and Guidelines for Lands

¹³ Prescribed fire refers not only to planned ignitions, but also unplanned ignitions that are allowed to burn under specific conditions. While not a "let-burn" policy, conditional fire areas have been designated as areas to allow a fire to continue burning under specific behavior parameters, such as rate of spread and air temperature. In the event that an unplanned ignition moves outside of condition fire prescription, aggressive suppression measures would be taken.

under Wilderness Review provides suppression guidelines for Wilderness Study Areas in the Planning Area (H - 8550-1, 7/5/95).

- Depending on circumstances, unplanned ignitions in fire risk classes 1-3 would be
 managed as prescribed fire, as long as the fire behavior falls within the conditional fire
 suppression parameters regarding size, air temperature, windspeed, flame length, etc.
- Prescribed fire would be carried out in accordance with approved fire management plans and appropriate smoke management and visibility goals and objectives.

Moderate-High Risk Classes

Unplanned ignitions in this risk class (4-6) would be aggressively suppressed.

- Rural or urban areas between high value public lands, particularly La Pine, Bend, Redmond, and Prineville areas, would be managed as top suppression areas. The interface areas are of special concern because of housing developments and adjacent high resource values.
- A timely post-burn review and evaluation in order to define any rehabilitation needs would be conducted.

Bear Creek Watershed

- Unplanned ignitions would burn under prescribed conditions, as long as District suppression forces are available to monitor and implement control actions as needed.
- Range developments would be protected.
- A maximum of four fires greater than 150 acres in size would be allowed to burn under prescribed conditions at any time.

Special Management Areas

ACECs

Lower Crooked River ACEC (2,592 acres)

The public lands would be managed in a manner that would ensure continued public use and enjoyment for a variety of recreation activities compatible with the protection and enhancement of the river's natural resources, including scenic quality. Also, high quality visitor services, including access roads, camping and day-use facilities, signs and interpretive information, would be provided.

Wagon Roads ACEC (191 acres)

Alternative 1 would continue to protect the integrity of the historic Huntington Road and provide for its use as in interpretive resource. B/LP RMP does not allow surface occupancy for fluid mineral leasing, and a withdrawal of this ACEC from mineral entry under the 1872 mining laws would be pursued.

Wilderness Study Areas/ISAs

No analysis of Wilderness Study Areas was included in the B/LP RMP. However, subsequent direction in addition to the Interim Management Plan can be found in the Millican OHV EA and Litigation Settlement Agreement (see detailed reference in the Analysis of the Management Situation, pages 129-130).

Caves

*Pictograph (Stout) Cave*Pictograph Cave would be closed year-round to all visitation.

Land Uses

Livestock Grazing

Under current management, conflicts between livestock grazing and uses on public and adjacent private land are resolved on a case-by-case basis. There is no system in place to estimate potential for problems or to help the BLM prioritize where action is most needed to prevent future conflicts. There are no guidelines to help managers decide where potential conflicts are so high that livestock grazing might no longer be manageable under the current conditions (and there is a need to change conditions or discontinue livestock grazing).

After vegetation treatments (such as prescribed burns, seedings, juniper cuttings, weed treatments, et cetera) and wildfires, livestock grazing would not be permitted for the first full year and through the second growing season following the event (per 2002 decision briefing clarifying B/LP RMP direction). This would mean if the BLM used herbicides in the fall of year one to slow the spread of leafy spurge on 1 acre, the entire affected grazing allotment pasture would not be grazed by livestock until mid-July of year three. The field manager could adjust this restriction upon recommendation from an interdisciplinary team. Exceptions are not specified.

About 6,800 AUMs on 23,509 acres of scattered parcels in the La Pine area would be added to existing allotments or used to create new allotments (shown as Allotment #9999, unallotted La Pine, in Appendix G and on Map H), as directed by B/LP RMP. The RMP listed the fences, water, and other developments necessary to accomplish this.

The B/LP RMP also directed the allocation of an additional 6,800 AUMs deemed available as a result of increased forage production after timber treatments in the La Pine area. These timber-related AUMs were never allocated, and at this time the timber has begun to grow back, so not all of the forage is available at present. These AUMs are not displayed in Appendix G.

Many of the general management goals and direction were modified when the Standards for Rangeland Health were incorporated into the B/LP RMP in 1997 (see CTA section in this chapter). Direction that was not amended and that continues in this and all alternatives is described in the CTA section in this chapter, and displayed in Appendix C.

Minerals

Alternative 1 would provide for commodity production while protecting natural values, and allow development of locatable, leasable, and salable mineral resources across the entire planning area except in areas identified in the B/LP RMP as closed to mineral entry (see B/LP RMP, pages 107- 121, for specific minerals guidelines; also see Map S-22, Minerals Alternative 1). Under this alternative, approximately 403,910 acres would continue to be available for mineral material sales. Seasonal restrictions on all mineral operations would continue to apply to 52,587 acres. Surface occupancy for fluid mineral leasing would continue to not be allowed on 21,254 acres.

Forest Products

Decisions on timber harvest in the La Pine area would be made with four primary objectives: 1) reduction of extreme fire hazard; 2) salvage of dead and dying timber; 3) successful reforestation; and 4) increasing subsequent growth of commercial tree species. Specifically, in the La Pine portion, 14 MMBF of timber and 2,500 cords of firewood would be harvested annually. In the Brothers portion, 87 MMBF of timber and 2,000 cords of firewood would be harvested annually. Dead timber would be utilized to reduce extreme fire hazards while accommodating other resource values. Forestland would be managed to minimize losses or damage to commercial tree species from insects and disease. Maintaining or improving site productivity would be a basic objective in all forestry practices. Harvesting minor forest products, such as posts, poles, or firewood, would be guided by similar considerations.

Realty Permits/Military Uses

Alternative 1 would provide for commodity production while protecting natural values (B/LP RMP). Military training is currently permitted on approximately 28,858 acres. 14

Visual Resources

The brothers Grazing Management Program EIS (1982) established VRM Class designations for the planning area, which were brought forward into the Brothers/La Pine RMP (1989). The following allocations were made in these plans:

VRM Class 1

The Horse Ridge ACEC/RNA/ISA is identified as VRM Class I in the Brothers Grazing Management Program EIS. Both the Badlands and Steelhead falls WSA are also designated as VRM Class 1 by National Policy adopted after the B/LP RMP was adopted in 1989.

VRM Class 2

Areas identified as VRM Class 2 include both sides of State Highway 20 at the Horse Ridge summit, and the Smith Rock block of BLM-administered lands.

VRM Class 3

In the Brothers Grazing Management Program EIS, the majority of the planning area located west of the Millican Valley OHV area is designated as VRM Class 3. This would include the geographic areas such as Cline Buttes, Bend-Redmond, Mayfield, Tumalo, Northwest, and Steamboat Rock.

VRM Class 4

The area generally encompassing the Millican Valley OHV area is designated as VRM Class 4, as is the Skeleton Fire area.

VRM Class 5

No areas were identified as VRM Class 5 (in need of rehabilitation).

Recreation

The B/LP RMP designated approximately 153,664 acres (38 percent) of the planning area as open to off-road vehicles. The travel management designations in the B/LP RMP have

¹⁴ Several of the pre-GIS documents refer to the same area as 31,352 acres. The discrepancy is a calculation error that attributed full acreage to sections that do not have the standard number of acres per section.

been amended by additional planning decisions, including the Millican Valley Plan and associated Consent Judgment. These changes have generally resulted in greater acreages in the current planning area being designated as either Limited or Closed than originally in the B/LP RMP. Alternative 1 designates approximately 6,553 acres (1.6 percent) as closed to motor vehicles and approximately 227,379 acres (56 percent) as Limited. The travel management designations for Alternative 1 are shown on Map 8, Recreation Travel Access and Motorized Use Seasons (see pages 45-48 of the B/LP RMP for guidelines specific to geographic areas).

Because the B/LP RMP did not provide specific management direction for recreation use beyond the management of OHV and rockhounding use, management of these activities are generally the only ones with specific direction in Alternative 1 (see also Minerals Section, Rockhounding).

Geographic Areas

The B/LP RMP did not identify specific geographic areas similar to the UDRMP. However, Alternative 1 is described using these UDRMP geographic areas for ease of comparison.

Badlands

The Badlands WSA would be managed for motorized use on a designated system of inventoried routes, comprising 7.6 miles available year-round and 20.5 miles available seasonally. Including the above mentioned routes, approximately 49 miles of routes would be available for non-motorized recreation use.

- Motorized use would be limited to the following routes and seasons only:
- 1. Route 8 (approximately 8 miles)--Open to motor vehicles year-round.
- 2. Routes 4, 5, 6, and 7 (approximately 12 miles)--Open to motor vehicles between May 1 and November 30.
- Mountain bike use would be managed under IMP policy, which does not allow
 any vehicle off existing ways, trails, etc. IMP policy allows mechanical transport,
 including mountain bikes, only on existing ways and trails and "open" areas that were
 designated prior to the passage of FLPMA.

Bend/Redmond

The entire block is designated Open to motorized vehicles year-round.

Cline Buttes

- Cline Buttes block south of State Highway 126 designated as Limited to existing roads and trails year-round.
- Cline Buttes block north of State Highway 126 designated as Open
- Small parcels along Middle Deschutes are Closed to motorized vehicles.
- Youngs Avenue parcel east of Cline Buttes is designated Open year-round

Horse Ridge

The Skeleton Fire Travel Management area is Limited to designated roads only, year-round.

- Continues Millican Plan policy that "No designated trails will be provided in Horse Ridge," but leaves possibility for future trail designation if easements or private land in center of area are acquired.
- A portion of Horse Ridge would be managed under provisions of the Millican Plan
 and the consent judgment, and other portions of Horse Ridge would be managed
 under provision of B/LP RMP; therefore, some of this area managed for designated
 roads and trails, with seasonal restrictions on both motorized and mechanized use,
 while other areas in Horse Ridge are Limited to existing routes and open year-round.
- The Horse Ridge ACEC/RNA is Closed to motor vehicles year-round.

La Pine

The entire area is designated as Open to motor vehicles.

Mayfield

Motorized Vehicle use is limited to a designated road system only in the area north of Alfalfa Market Road. The area south of Alfalfa Market Road is designated Open.

Millican Plateau

The area is Limited to existing Roads and Trails as per the Consent Judgment except: The remainder of the area located west of State Highway 27, east of Johnson Market Road, south of State Highway 26 and north of Reservoir Road is managed as limited to existing roads and trails.

The remainder of the area located east of State Highway 27 and north of Prineville Reservoir is designated as either Open, Closed, or Limited, with no boundaries that are recognizable on the ground.

North Millican

- The entire area would be managed as Limited to designated roads and trails; seasonally closed from December 1 to April 30.
- Roads and trails not identified in the designated trail system and not already identified
 as open to public use (such as county roads) would be evaluated and placed into one
 of the following categories:
 - 1. Roads that are closed to public use but would be available for administrative and emergency use.
 - 2. Trails and roads that would be closed and rehabilitated.
 - 3. Roads needed for continued public motorized use
 - 4. Roads that would be designated for, or converted to, non-motorized use.
- Non-competitive Use Highway area (also known as the Deer Winter Range area in Millican Plan) is Open for casual motorized and mechanized use from May 1 to November 30 annually.
- Events for both motorized and non-motorized activities would be Limited according to the following seasonal restrictions:
 - 1. Entire Highway area would be Open to motorized and mechanized events during month of April and from October 1 through November 30 annually.
 - 2. Entire area would be Open year-round for non-motorized and non-mechanized use. Closure restrictions in deer winter range identified in Millican Plan would apply to horse-drawn carts (i.e. no horse-drawn carts from December 1 to April 30, except of course if they are used in an event during the month of April).

- 3. Events no non-motorized/non-mechanized events would be allowed in Deer Winter Rangefrom December 1 through April 30 (as defined by Millican Decision Record).
- 4. Most of the area (i.e., the southern area and both sides of West Butte Road, also known as the area covered by the Millican OHV Area boundary) would be open for mountain bike events during April and from October 1 through November 30 each year, on designated road and trails only. The remainder of the area (i.e., West Butte and the area west of State Highway 27 and east of Juniper Acres subdivision) would be open for events year-round.
- Development of Horse Use staging area (for dispersed, primitive camping) in southeast portion of area, located off Road 6521, would occur.
- No designated, motorized trails would be developed in Rodman Rim area.
- Entire area would be managed as Limited to designated roads and trails, seasonally closed from December 1 through April 30, except for:
 - 1. Year-round routes would be open to street legal vehicles
 - 2. BLM lands on the eastern edge of the Southeast Area would be managed as Limited to existing routes and trails. This area includes lands east of the Millican Plan OHV area boundary, north of State Highway 20, west of State Highway 27, and south of Bear Creek/Reservoir Road.
- Most of the area (i.e., the southern area and both sides of West Butte Road, also referred to as the area covered by the Millican OHV Area boundary) would be open for OHV events during April and from October 1 through November 30 each year, on designated road and trails only. The remainder of the area (i.e., West Butte and the area west of State Highway 27 and east of Juniper Acres subdivision) would be open for events year-round.
- The entire area would be open for mountain bike use year-round¹⁵

Northwest

The area would be designated Open.

Prineville

All BLM lands in the area would be designated as Open year-round, except:

- 160 acre Barnes Butte Parcel would be designated Closed
- The southeast corner of the area (Eagle Rock area north of Prineville Reservoir) would be designated as Limited to existing roads.

Prineville Reservoir

- The southern two-thirds of the area would be designated as Open (as per B/LP RMP.
- The area adjacent to BOR managed lands south of Prineville Reservoir would be Limited to designated roads (post B/LP RMP EA) or Limited to designated roads and trails (B/LP RMP).

¹⁵ Note: only the crucial deer winter range (i.e., North Millican west of West Butte Road) as shown in the Millican Plan is seasonally closed to mountain bikes.

Smith Rock

The entire block would be designated Closed to motor vehicles year-round (see Common to All Alternatives).

South Millican

- Millican would be Limited to designated roads and trails, with a seasonal closure (December 1 to July 31), as per the Consent Judgment.
- Primary staging area for casual use and event in the South Millican Area would be located approximately 1-½ miles west of Millican and one mile south of State Highway 20 (see Map 1, UDRMP Planning Area). Typical improvements would include bulletin board, loading ramp, and toilets as use levels warrant.
- The South Millican Area would remain as part of the larger Millican Valley OHV Area.

Steamboat Rock

- Main Steamboat Rock Block would be designated as Open, with year-round use.
- The BLM lands along the Deschutes and Crooked Rivers north of the main Steamboat Rock block (i.e., west and east of Crooked River Ranch) would be Limited to designated roads or routes.
- Isolated parcels northwest of Redmond would be designated as Open, with year-round use.

Tumalo

- Most of main block located north of Couch Market Road would be designated Limited to existing roads and trails.
- Small block south of Tumalo Reservoir would be designated Open.
- All BLM lands in the Tumalo Block are seasonally closed to motor vehicle use from December 1 to April 15.

Transportation and Utilities

All transportation and utilities direction contained in B/LP RMP and subsequent decisions would be carried forward through all of the alternatives (see Common to All Alternatives).

Regional Transportation

Alternative 1 would not specifically designate transportation corridors for regional transportation systems; however, applications for rights-of-way would be evaluated as required under law, and could potentially be granted after analysis. For the purposes of comparison to other alternatives, consistent with state requirements, the No Action alternative would mean no future rights-of-way. Under this alternative, urban needs would be assumed to be resolved within existing urban areas.

Land Ownership

Alternative 1 would maintain or increase public land holdings in Zones 1 and 2; exchange, or if exchange is not feasible, sell Zone 3 lands if they meet FLPMA Section 203 disposal criteria; and acquire legal access to inaccessible public lands in Zone 1 and 2 (see Glossary for definition of land ownership zones).

Alternative 1 would exchange or sell land in the La Pine core area; and exchange, transfer or sell public land near Bend, Redmond and Prineville to local governments as needed to accommodate community expansion and other public purposes (see B/LP RMP for specific criteria used in selection).

Public Health and Safety

Firearm Discharge

The B/LP RMP does not address the issue of firearms within the planning area. It does acknowledge that hunting "occurs throughout the planning area." Subsequent Federal Register firearm closures have been established to protect wildlife resources and other natural and cultural features, reduce vandalism, and improve public safety. These closures include a raptor closure at Awbrey Falls, and a raptor/high use closure in the Middle Deschutes Wild and Scenic River.

In addition, wildlife management related to campfires is briefly addressed in the Public Health and Safety section, although most of the wildland fire management discussion can be found in the Vegetation section.

Campfires

Pursuant to 43 CFR 9212.2 (a), "To prevent wildfire or facilitate its suppression, an authorized officer may issue fire prevention orders that close entry to, or restrict uses of, designated public land," the following sections of river would be closed to campfires seasonally, from June 1 to October 15:

- 1. Within ½ mile of the River's edge along the Lower Crooked River from the Highway 97 bridge to Lake Billy Chinook,
- 2. Within ½ mile of the River's edge along the Middle Deschutes River from Highway 20 bridge to Lake Billy Chinook,

If determined necessary, the fire closures could be extended based on existing conditions.

Archaeology

Alternative 1 would conduct cultural resource site monitoring, and complete cultural resource surveys in all project areas where ground disturbance would occur. Sites encountered during surveys would be protected from the effects of project undertakings, evaluated for their eligibility to the National Register of Historic Places and managed for their resource values (see B/LP RMP page 126 for specific guidelines for cultural resources).

Management Direction Common to Alternatives 2—7

Some changes to the current management would be adopted in Alternatives 2-7.

Ecosystem Health and Diversity

Vegetation

Ecosystem Maintenance and Restoration

Alternatives 2 – 7 would emphasize maintaining and restoring healthy, diverse and productive native plant communities appropriate to local site conditions. These alternatives would identify opportunities to actively re-pattern vegetation on the landscape to conditions more consistent with landform, climate, biological, and physical components of the ecosystem. Vegetation structure, density, species composition, patch size, pattern, and distribution would be managed to reduce the occurrence of uncharacteristically large and severe disturbances. Actions would maintain or mimic natural disturbance regimes so that plant communities would be resilient to periodic outbreaks of insects, disease and wildfire (see Appendix XX: Best Management Practices).

Special Status Plants

Alternatives 2 – 7 would manage special status plant species so that BLM actions do not contribute to the need to federally list them as threatened or endangered.

Shrub-Steppe Communities and Old-Growth Juniper Woodlands

Alternatives 2 – 7 would emphasize maintaining and restoring large contiguous stands of healthy, productive and diverse native shrub-steppe plant communities through active use of prescribed fire and mechanical treatments.

Under these alternatives, the health and integrity of old-growth juniper woodlands/savannah would be protected and restored through a broad scale conservation approach. Activities would consider the importance of old growth juniper in mapped range.

Late and Old Structure Ponderosa and Lodgepole Pine

Alternatives 2 – 7 would provide direction to maintain and promote old forest structure and conditions through active treatments and restoration activities. Existing and developing old forests would be protected from ground-disturbing development and land use actions, and from uncharacteristically severe natural disturbances (i.e. stand-replacing wildfire, and insect and disease epidemics). Actions would be designed to develop and maintain stand structures that are relatively complex with highly variable tree densities, healthy and diverse understory composition, and abundant snags and downed logs.

Ecosystem Condition and Assessment

Alternatives 2 – 7 would include management direction to obtain and efficiently display information to help integrate analyses at all levels ranging from broad-scale assessments to site-specific projects.

Wildlife

Alternatives 2 – 7 would emphasize actions or conditions of use to promote conservation of listed species and the ecosystems on which they depend. Management for wildlife values would be emphasized less in WUI areas to reduce the potential for extreme wildfire potential in the wildland urban interface zones.

These alternatives would all incorporate existing and future potential relevant landscape features near Prineville Reservoir and Grizzly Mountain into a conservation strategy. Management techniques, such as altering or removing trees and shrubs, prescribed and managed wildland fire, livestock grazing, and planting may be used to maintain or improve habitat conditions.

Common to Alternatives 2 – 7 would also emphasize protecting and restoring special habitat components or features that contribute to the productivity of species. These features include, but are not limited to caves, cliffs, playas, riparian areas and wetlands, foraging areas, and snags and downed wood. These alternatives would provide direction to maintain and/or recruit adequate numbers, species and sizes of snags and levels of downed wood to contribute meaningfully to the needs of wildlife, invertebrates, fungi, bryophytes, saprophytes, lichens, other organisms, long-term soil productivity, nutrient cycling, carbon cycles and other ecosystem processes (see also Vegetation, Ecosystem Maintenance and Restoration).

Suitable special habitat components would be provided across the planning area (see also Vegetation), and could be maintained or improved using a variety of techniques, such as mowing of shrubs, prescribed burning, livestock grazing and/timber harvests. Rock quarries could be developed on cliffs or talus slopes not occupied by special status species.

Common to Alternatives 2 – 7 would be management direction to respond to the need to determine the distributions, abundance, reasons for current status, habitat, and management needs of Special Status Species occurring on BLM lands, and evaluate the significance of these lands and BLM actions for the conservation of these species.

Common to Alternatives 2 - 7 would be management direction to emphasize maintaining and supporting healthy, productive and diverse populations and communities of native plants and animals (including species of local importance) appropriate to soil, climate and landform. Where consistent with habitat capabilities, this agency would help meet ODFW management objective numbers for pronghorn, deer and elk.

Common to Alternatives 2 - 7, all new fences would be built to standard Bureau wildlife specifications to allow wildlife passage and existing fences would be modified as appropriate (B/LP RMP, p. 97), with the exception of fences built specifically to keep ungulates out of an area.

Sage Grouse

Where appropriate, actions would be consistent with the Greater Sage Grouse and Sagebrush-Steppe Ecosystems Management Guidelines as directed in IB No. OR-2000-334. These guidelines would be adopted as interim guidance until a new management strategy is developed and adopted. This management strategy is to be implemented in concert with the process established in BLM's "Standards for Rangeland Health and Guidelines for Livestock Management for Public Lands in Oregon and Washington" and other applicable laws, regulations, and policies.

Townsend's Big-Eared Bats

In addition to management direction Common to All Alternatives for caves with known Townsend's big-eared bat suitable habitat, management direction Common to Alternatives 2 - 7 would be to provide suitable habitat for the restoration of bat populations (including Townsend's big-eared bats) in a portion of the lava tube system known as Redmond Caves. Human uses may be excluded from some portion of the system (see also Special Management Areas).

Hydrology

Riparian

Common to Alternatives 2 – 7 would provide direction to maintain, protect, and/or restore aquatic and riparian-dependent terrestrial resources. Riparian Conservation Areas (RCAs) are intended to: maintain and restore riparian structures and functions; benefit fish and riparian-dependent resources; enhance conservation of organisms that depend on the transition zone between upslope and the stream; and improve connectivity of travel and dispersal corridors for terrestrial animals and plants, and aquatic organisms. These alternatives would have management direction to restore, maintain, or improve riparian vegetation and habitat diversity to achieve healthy and productive riparian areas and wetlands and to support populations of well-distributed native and desired nonnative plant, vertebrate, and invertebrate populations.

Water Quality

Common to Alternatives 2 – 7 would provide management direction to ensure that surface water and ground water influenced by BLM activities comply with or are making progress toward achieving State of Oregon water quality standards for beneficial uses as established per stream by the Oregon Department of Environmental Quality (ODEQ). Where water quality exceeds the water quality standards, water quality would not degrade to the point where it impacts beneficial use. This would be achieved through improved riparian vegetation, stream shade, and stream channel function.

For streams with water quality limited segments identified by the State of Oregon, uses and activities would be allowed in watersheds only if they would have no adverse effects on restoring water quality to required State water quality standards while protecting and enhancing natural values. Public use would be allowed along streams and around other water bodies, as long as State water quality standards are either attained at the same or greater rate than if the use or activity were absent or maintained. Management would be adjusted as needed for those uses and activities that are not leading to the attainment of state water quality standards. For streams with water quality limited segments (impaired waters) as defined by section 303(d) of the CWA, management activities would be implemented with the intent to restore water quality to levels that meet state water quality standards. As outlined in the Memorandum of Understanding between the BLM and DEQ, the BLM will comply with the Federal CWA and the State DEQ's program by employing the joint USFS and BLM protocol for addressing CWA section 303(d) listed waters. One goal of the strategy is to address all waters on BLM-administered lands generally within the timeline established by the State of Oregon DEQ. The BLM will take actions relative to 303(d) listed waterbodies in accordance with the protocol as outline in Appendix C (Protocol for 303(d) listed streams).

Watershed/Hydrologic Function

Common to Alternatives 2-7 would, where the capability exists, restore, maintain and improve upland and hydrologic function through the reduction of overland flow, increased infiltration, and improved floodplain function. Within the Broad Scale High Restoration Priority Sub-basins as identified on the Vegetation map (Map 4) that are not already verified, these alternatives would determine actual restoration needs prior to any large scale site disturbing activities that could affect hydrologic function. Existing

habitats that support the strongest populations of wide-ranging aquatic species would be secured. "Securing" can mean either reducing threats within the subwatershed or reducing threats in adjacent subwatersheds that would prevent achievement of subwatershed objectives.

Fire/Fuels Management

Common to Alternatives 2-7 would provide an appropriate management response on all wildland fires, with emphasis on firefighter and public safety. When assigning priorities, decisions would be based on relative values to be protected commensurate with fire management costs.

Burned areas would be rehabilitated to mitigate the adverse effects of wildland fire on soil and vegetation in a cost-effective manner and to minimize the possibility of wildland fire recurrence or invasion of weeds.

These alternatives would also provide management direction to restore and maintain ecosystems consistent with land uses and historic fire regimes through wildland fire use, prescribed fire, and other methods, as well as reduce areas of high fuel loading resulting from years of fire suppression that may contribute to extreme fire behavior.

In the wildland urban interface, the management of live and dead vegetation to provide for human safety in the event of a wildland fire under hot, dry summer weather conditions would be the top management priority. Treatments would be designed to allow for manageable low flame lengths, while still considering recreation opportunities, wildlife habitat and corridors, visual quality, air and water quality, and public access issues.

Air Quality

No actions taken by BLM in implementation of the Upper Deschutes RMP Revision will engage in, support, provide financial assistance for, license or permit or approve any activity that does not conform to the Oregon Smoke Management Plan, a companion to the Oregon State Implementation Plan.

Alternatives 2 – 7 include common guidance to meet the national ambient air quality standards (NAAQS) as described in the CAA (Clean Air Act).

Special Management Areas

Special Management Areas within the Upper Deschutes RMP boundary include Areas of Critical Environmental Concern (ACECs), Research Natural Areas (RNAs), Wilderness Study Areas (WSAs), Wild and Scenic Rivers (W&SR), and Caves.

Common to Alternative 2 – 7 would be management direction to eliminate a section of the Wagon Roads ACEC, and add an ACEC designation to two sections of other historic roads and a portion of the historic Tumalo irrigation canals¹⁶. The Lower Crooked River ACEC would also be dropped from that designation. About 2600 acres would be eliminated from ACEC designation, and about 1800 acres added common to Alternatives 2 - 7.

There would be common direction for new uses within ACECs to be evaluated for consistency with ACEC values. The designation could result in future limitations

¹⁶ Note that the Tumalo Canals is incorporated into other proposed ACECs in Alternatives 3 and 4, and stands alone in Alternatives 2, 5, 6, and 7, but guidance for the area remains the same.

on location, extent, or intensity of use or include stipulations to avoid, reduce, or compensate for effects to values. The degree to which other uses might be affected would depend upon the potential effects of a site-specific proposal on the specific ACEC values. Some specific prohibitions on uses are included in the designations for specific ACECs. Common guidance includes limitations on removal of vegetation or rockhounding, disposal of property, or issuing patent-based R&PP leases. The Wagon Road and Tumalo ACECs would be managed with an emphasis on interpretation of the historic resources, would limit motorized and military activities within portions of the ACECs and close all or portions of the areas to uses that are likely to adversely affect those resources. Common to Alternatives 2 - 7 would be an emphasis on establishing locatable boundaries for Wilderness Study Areas, and to specify closures to activities that could concentrate or leave evidence of human uses.

Cave resources within the planning area would receive common guidance to protect the basic integrity of the system and potential cave biota if they have not been determined to be significant caves under the Federal Cave Resources Protection Act. Those that have been nominated or determined to be significant under the Federal Caves Resources Protection Act would have common general guidance for promoting cave integrity and conditions under which human uses would be allowed, including closing caves to specific activities that are likely to have an adverse effect on cave resources. Additional specific guidance would be provided for Redmond and Pictograph caves.

ACECs

One addition to an existing ACEC, Historic Roads, would be designated, and one existing ACEC, Lower Crooked River, would be removed from ACEC designation. The objectives and guidelines identified in this section apply to all of the "action" Alternatives (2-7).

In general, for all ACECs, adjustments out of federal ownership would not occur. Harvest of special forest and range products would not be allowed, except in conjunction with restoration treatments and/or consistent with the values of the ACEC. In addition, R & PP leases would not be issued for lands within ACECs unless such leases would be non-patent leases and would not impair the values for which the ACEC was designated.

Tumalo Canals ACEC

Mineral material sales would not be allowed in the south ½ of sections 29 and 30 and the north ½ of Sections 31 and 32, T 15 S., R. 12 E., to protect the Tumalo Canals area. Surface occupancy for fluid mineral leasing would not be allowed. Approved plans of operation would have stipulations to protect the values of this ACEC. An area adjacent to and east of Barr Road would be closed to prescribed fire, mountain biking, horseback riding, livestock grazing, rockhounding, OHV use, target shooting, dispersed camping and managed specifically for interpretive use. This area would be defined by signs, fencing, or other means.

Wagon Roads ACEC

Alternatives 2 - 7 would protect and maintain the segments of the historic Horner, Huntington and Bend-Prineville roads designated as an ACEC.

Alternatives 2 - 7 would add¹⁷ approximately six miles of historic Horner Road and approximately 5 miles of the historic Bend-Prineville Road to the existing Wagon Roads ACEC. The ACEC would constitute approximately 986 linear acres, including a 300-

¹⁷The additional segments of the Wagon Roads ACEC in Alternatives 2-7 receive the same management guidelines applied to the ACEC in the Common to All section.

foot distance on either side of the road segments to protect associated historic features (see Map 7). The central and northern segments of the Wagon Roads ACEC located in Township 16, Range 13, Section 21 and Township 15, Range 13, Section 33, respectively (see Map 7), would be removed from ACEC designation.

No new roads or rights-of-ways would be allowed within the ACEC. The ACEC would be closed to the use of paintball guns. In addition to the restrictions noted, firearm discharge, overnight camping, and geocaching¹⁸ activities south of McGrath Road (i.e., surrounding the segment of Huntington Road in Section 1) would not be allowed. No competitive events would be allowed except at designated trail or road crossing points. Tracked military vehicles would not be allowed on the historic roads. Locations where tracked vehicles would cross the historic roads have been, or would be in the future, determined in consultation with the Oregon Military Department. Vegetation and wildlife habitat management would not be allowed unless such projects maintained and enhanced the special values of the ACEC. An area one mile of either side of the roads for which this ACEC is designated would be closed to mineral material sales and surface occupancy for fluid mineral leasing. Geophysical exploration would be restricted to protect the special values of this ACEC. Plans of operation would be submitted by prospective applicants and approved by the BLM prior to any development of mining claims. Approved plans of operation would have stipulations to protect the values of this ACEC. The collection of any rock materials would not be allowed.

Livestock grazing and associated developments would be allowed so long as livestock do not concentrate in the ACEC and developments do not affect the resources for which the ACEC was designated. Opportunities for the designation of a pedestrian trail system with interpretive signage would be pursued. OHV use would be allowed on designated trails within the 300-foot area on either side of each road (except the southernmost segment), to the extent necessary to create safe and maintainable trail crossings. OHV trails that parallel the historic roads would be located beyond 300 feet from each side of the road to the maximum extent feasible. Special Recreation Permits (SRPs) would be issued for foot traffic events/group use only on the road segments.

Research Natural Areas

Within the Powell Butte RNA, livestock grazing would be prohibited, pending construction of a boundary fence. Horse Ridge and Powell Butte RNAs would be closed to motorized and mechanized use. No designated roads or trails would be identified, and special recreation permits would not be authorized. Camping would not be allowed. The RNAs would be closed to activities that concentrate use in certain areas, such as geocaching. Vegetation and wildlife habitat management project work would be allowed if specified in a natural area management plan for the RNA. Collection or sale of vegetative materials would not be allowed. Research and educational activities would be encouraged. In addition, Horse Ridge ACEC/RNA is managed under IMP for lands under wilderness review, which may place additional management restrictions.

Wilderness Study Areas

Wilderness Study Areas would be managed to maintain wilderness suitability, consistent with the "Interim Management Policy for Lands under Wilderness Review" (1995). In Alternatives 2 – 7, the WSAs would be Closed to paintball and geocaching use.

¹⁸ For this plan, geocaching is defined as leaving any items on BLM administered lands for the purposes of posting or advertising the approximate location of those items for others to find.

Caves

As directed by the Federal Caves Resources Protection Act (1988), Alternatives 2-7 would emphasize managing caves nominated for significance or determined significant with an emphasis on education, research, and protection of cave resources and to manage activities and use to not impair the nominated values for which the cave may be determined significant.

Under Alternatives 2-7, group use of caves would be allowed only under Special Recreation Permit authorizations. Group size would be limited to six to eight people at one time and no more than three tours per cave per day. Group use under permit must comply with seasonal restrictions and provisions of the FCRPA. Access to all Significant/Nominated Caves would be restricted to foot access only. For caves with designated parking areas, the agency would consider providing a visitor register to collect information on the visitors name, purpose, number in party, comments, and use patterns. Caves with high resource concerns and those with active volunteer or stewardship programs would be considered as priorities for visitor registers. In addition, for caves with designated parking areas, signs would be provided with cave information, cave etiquette and Leave No Trace ethics.

Mountain bike, horse, or motor vehicle use would not be allowed in caves. The possession and use of alcoholic beverages, as defined by state law, would be prohibited in all caves. Common to Alternatives 2 – 7 would prohibit the use of glass containers within caves to reduce litter and provide a safer environment for cave visitors. Significant/Nominated Caves would be closed to geocache use. The use and/or possession of chalk or visually apparent hand-drying agents would also be prohibited in Significant/Nominated Caves.

Redmond Caves

Alternatives 2 – 7 would manage the Redmond Caves parcel to protect and maintain the resources of Redmond Caves, including biologic, cultural, and geologic features, and would provide for recreational use that is consistent with management of these cave resources.

The 40-acre Redmond Caves parcel would be designated as Closed to public motorized and mechanized vehicles for management of cave resources. The Redmond Caves parcel would be closed to campfires, overnight use (except under permit), geocache use, paintball use, rockhounding and mineral material sales and surface occupancy for fluid mineral leasing.

Pictograph Cave

Alternatives 2 – 7 would manage Pictograph (Stout) Cave to protect scientific values and cave resources (including habitat for bats), and to meet the requirements of the FCRPA. Recreation management would be oriented toward interpretive and educational opportunities.

Land Uses

Livestock Grazing

Common to Alternatives 2 - 7 would be direction for continued livestock grazing, while reducing conflicts with and meeting needs of other uses and resources.

Definitions of urban and rural for Livestock Grazing

In Alternatives 5 and 6, in the livestock grazing section, the following definitions of urban and rural are used: Urban includes all of La Pine, and those areas north of a line running

east out of Bend on Highway 20, then up Dodds Road to Alfalfa, north on Johnson Ranch Rd, then east along the mid-slope of the Powell Buttes, around to Millican Rd, south along State Route 20, then east at Prineville Reservoir. Rural is all other areas.

Estimating Potential for Conflict and Demand

In Common to Alternatives 2 - 7, the BLM would use a formula to estimate potential for "conflict" and "demand" to help identify where problems are likely to occur. These estimates would be used to prioritize work. The BLM would also set maximum allowable conflict and demand thresholds, and take actions as necessary to keep management costs and conflicts below those thresholds. The maximum allowable conflict/demand levels vary by alternative, and are displayed in Table 2-11 (for Alternatives 2-6, below), and in Table 2-71 (for Alternative 7). Information regarding outcome for specific allotments is provided in Appendix G.

A model or formula is used in Common to Alternatives 2 - 7 to help estimate which allotments have the highest potential for problems, or conflicts. Potential conflicts are classified as low, moderate or high (described below). The BLM would then use these estimates to help make decisions about where livestock grazing should continue, and where conflicts might be high enough to warrant modifying or discontinuing grazing now or in the future.

The formula for Alternative 7 is modified from that used for Alternatives 2-6 by the addition of an "ecological conflict" factor. Existing management direction already provides a process for responding to ecological concerns, but this addition would provide decision-makers with a way to consider social, economic, <u>and</u> ecological factors. There are also some minor changes to how social and economic conflict are estimated, including dropping some criteria, adding others, and "weighting" the equation so that some criteria counted for more than others.

Estimating potential for human/livestock conflicts

In Alternatives 2-6, the potential for conflict is estimated using three factors: 1) Residential or resort zoning, 2) Busy roads (paved and/or 45mph+), and 3) Closed range (within a livestock district). Conflict is considered "high" when two or three of the factors listed above exist within ¼ mile, <u>or</u> where two exist within ¼ mile and the third within ½ mile. "Moderate" conflict is where all of the above factors exist within ½ mile, or where one exists more than ½ mile away but the other two are within ¼ mile, or one of them is within ¼ and the other is within ½. All other areas are considered "low" conflict.

Table 2-11: Grazing decision-making matrix for Common to Alternatives 2-7

			Conflict Level	
		Low	Moderate	High
<u> </u>	Low	Open ¹ in Alts 2, 3 Closed ² in Alts 4, 5, 6	Open in Alts 2 & 3 Closed in Alts 4, 5 & 6	Open in Alts 2, 3 Closed in Alts 4, 5, 6
Demand Level	Moderate	Open in Alts 2, 3, 4 Closed in Alts 5, 6	Open in Alts 2, 3, 4 Closed in Alts 5, 6	Open in Alts 2, 3 Closed in Alts 4, 5, 6
Д	High	Open in all Alternatives	Open in Alts 2, 3, 4, 6 Closed in Alt 5	Open in Alts 2, 3, 6 Closed in Alt 4, 5

¹All "Open" allotments are still subject to grazing modification as necessary to reduce conflicts with other uses of public land, to achieve Standards for Rangeland Health, and to meet other goals, objectives, and management direction listed in the Common To All section.
²In "Closed" allotments, livestock grazing would be discontinued for the life of the plan. The closures would be temporary, subject to review and change during the next planning cycle. Affected permittees would receive 2-year notification unless they waive that right, and they would be compensated for their financial interest in range developments (based on their contribution to the project, minus depreciation). Displaced permittees in good standing would receive priority for permits in vacated allotment and un-allocated AUMs in other allotments.

In Alternative 7, potential for conflict is estimated using three factors: 1) Miles of residential or resort zoning along allotment boundary, 2) amount of recreational use, and 3) percent of allotment within a special management area (e.g., WSA) that was designated at least in part for "social" values (e.g., visuals, solitude). Factor 1 (zoning) was converted to miles/AUM, with the highest scoring allotment set at 100, and scaled down to zero from there. Factor 2 (recreation) is scored as 75 if the Allotment Categorization Form classified it as "M" on the recreation criteria on that form, and 100 if "H." For factor 3, the highest scoring allotment is set at 100, and scaled down to zero. If there were only a few scores at the high end for one of the factors, the raw score was multiplied so the scores for the factor were more evenly spread between 0 and 100 (aiming for about 1/3 falling above 67, at the "high" end). This was necessary to make the criteria sensitive enough to register differences between allotments. The factors making up the total social conflict score are weighted equally (each represents 33 percent of the total score).

Estimating potential for demand

In Alternatives 2-6, potential for demand was estimated using two factors: 1) Cost of new fences to enclose private land in closed range, or reconstruct allotment boundaries, and 2) Cost to patrol for cut fences, open gates. These two costs are defined below. Demand for an allotment is defined as low when 1) plus 2) is divided by the number of AUMs in the allotment, and the total is less than 2; moderate is when the score is between 2 and 10; and high when the score is over 10.

Fence maintenance and new fence needs are estimated and would need site visit and permittee input to get a more exact number.

Cost for new fence is assumed to be 4,000/ mile, divided by 10 years since it is not a cost that must be paid annually.

Patrol costs are assumed to be \$10/mile/week in areas of moderate patrol needs (definition follows), and \$15/mile/week in areas of high patrol needs, multiplied by the number of weeks the allotment is grazed, and divided by the number of pastures in the allotment. High patrol needs fences are those fences in or within ¼ mile of closed range <u>and</u> within ¼ mile of one of a busy road or residential zoning. Moderate patrol needs fences are those within ¼ mile of any one of the following: closed range, residential zoning, busy road; <u>or</u>, fences along private land boundary where Criteria 3 on Allotment Categorization Form is I (indicating high recreational use of the area) <u>and</u> not meeting the above "high patrol" criteria.

In Alternative 7, potential for demand was estimated using eight factors: 1) Waiting list for permit for allotment, 2) miles of residential or resort zoning along allotment boundary (this factor and factors #3 were calculated the same here as they were under social conflict), 3) amount of recreational use (calculated as above), 4) costs to install required new and maintain existing fence (assuming \$50/mi maintenance and \$4,000/mi new), 5) percent of allotment needing water hauled to troughs, 6) amount of seasonal restrictions on grazing (one season only = 100, two = 50, three = 25, year-round permit = 0, unknown = 50), 7) relative amount of forage (AUMs) in allotment, 8) percent of allotment containing important deer, grouse, and elk habitats. As with the conflict criterion, the high score for each factor is 100, with an even spread of scores between 0 and 100. Factors are weighted as follows: #1 is 20 percent of the total demand score, #2, #3, #4, #5, #7 are each 12 percent, and #6 and #8 are each 10 percent. Waiting list is based on professional judgment (12 years at Prineville District BLM as a Rangeland Management Specialist). The District has not kept a separate list for each allotment in the past.

Estimating potential for ecological conflict

This criterion was only used in Alternative 7. Potential ecological conflict is estimated using the following factors: 1) percent of the allotment failing to meet Standards for Rangeland Health (100 if entire allotment fails and livestock are a causal factor, 0 if

meeting standards or if rangeland health assessment has not been completed); 2) percent of allotment containing important deer, grouse, and elk habitats; 3) percent of allotment within a special management area (e.g., WSA) that was designated at least in part for "ecological" values (e.g., Pecks milkvetch). Scores were topped at 100 for each factor, and adjusted for an even spread between 0 and 100. The factors are weighted as follows: #1 makes up 40 percent of the total ecological conflict score, #2 and #3 are each 30 percent. The rangeland health assessments for allotments #5204, 5205, 5207 and 5209 are nearly completed, and the Alternative 7 column in Appendix G assumes that the preliminary indications remain true, and that the assessments would be finalized in the next few months.

General Guidance

Prescribed livestock grazing would be allowed to control weeds, reduce fire danger, or accomplish other management objectives, regardless of parcel status (including vacant allotments, areas of discontinued grazing, or Reserve Forage Allotment as described in Alternative 7).

.

Livestock would be excluded from Mayfield Pond after establishing livestock water source(s) at alternate locations in the allotment. Livestock grazing would also be discontinued in the fenced portion of the Tumalo Canals (see also Special Management Areas).

ACEC Guidance

In ACECs designated for Peck's milkvetch (the designated area boundary changes by alternative), grazing would be deferred until after mid-August at least every other year unless evidence shows other grazing systems are compatible with the objectives for which the area is designated.

Disturbance Events

After a disturbance event (examples below) which results in undesirable soil or plant conditions, livestock grazing would typically not be permitted (see exceptions, below) the remainder of the calendar year, and through the growing season of the next year.

į.

Exceptions would be for cases where such grazing would either not impede site recovery, or where livestock are used as a tool to aid in achieving certain recovery objectives (such as cheatgrass control).

.

Livestock grazing would resume after an interdisciplinary team visits the site and documents that soil and vegetation have recovered sufficiently from the initial disturbance to support livestock grazing. Disturbance events would include natural and human-induced events including but not limited to wildfire, prescribed burns, timber management treatments, juniper cuts, and rehabilitation seedings.

If a disturbance event does not result in undesirable soil or vegetative conditions, livestock grazing need not be excluded from the pasture. One example of a disturbance not requiring livestock exclusion is an herbicide treatments or juniper cut in an area that has previously been found to meet the Standards for Rangeland Health, and that appears to still meet these standards after the disturbance.

.

Livestock exclusion after disturbance events would also not be required if livestock would not be trailed through the affected area, and attractants (e.g., water, supplemental feed, salt) are not provided within one mile. Attractants could be closer than one mile if physical barriers (e.g., rimrock, fences) would prevent livestock access to the affected area.

-

Prescribed or permitted livestock grazing could occur any time after disturbances in pastures containing affected areas if an interdisciplinary team designs and monitors

the grazing to accomplish resource objectives (e.g. to control noxious weeds, or assist in getting broadcast seeds worked into the soil).

Minerals

Mineral Material Sales

Common to Alternatives 2 – 7 would meet the increasing demand for mineral materials while reducing mining conflicts with recreation, residents, natural resources and other management objectives. Common to Alternatives 2 - 7 would be guidance for establishing conflict-demand thresholds at one of three levels (low, moderate, or high) based on potential conflicts with residents, recreational users, and relative importance of the material site. Threshold for the levels of conflict and mineral material importance are outlined in Table 2-12 – Mineral Importance and Conflict Thresholds.

Public lands not withdrawn from mineral entry or under discretionary closure may be explored and/or developed for saleable mineral material and fluid mineral resources where conflicts with recreation, residents and natural resources do not exist or can be

Table 2-12: Mineral Conflict and Importance Thresholds

Category	Low	Moderate	High
Potential Recreation Conflict Level	Mineral material sites/ roads must be at least ½ mile from designated recreation sites where conflicts with recreation exist*; mining access roads may not cross trails.	Mineral material sites/ roads must be at least ¼ mile from designated recreation sites where conflicts with recreation exist*; mining access roads may cross trails.	Mineral material sites/ roads must be at least 1/8 mile from designated recreation sites where conflicts with recreation exist*; mining access roads may cross trails.
Potential Residential Conflict level	Mineral material sites/roads must be at least ½ mile from residentially zoned areas. Roads that feed from BLM-administered lands into residentially zoned areas may not be used for mining-related traffic.	Mineral material sites/ roads must be at least ¼ mile from residentially zoned areas. Roads that feed from BLM- administered lands into residentially zoned areas may not be used for mining-related traffic.	Mineral material sites/ roads must be at least 1/8 mile from residentially zoned areas. Roads that feed from BLM- administered land into residentially zoned areas may be used for mining- related traffic only if alternate routes are not available.
Potential Habitat Component Conflict Level	See Wildlife Emphasis Table for Primary Emphasis, and refer to allocations and guidelines under CTA and CT 2 - 7	See Wildlife Emphasis Table for Secondary Emphasis, and refer to allocations and guidelines under CTA and CT 2 - 7	See Wildlife Emphasis Table for Minor Emphasis, and refer to allocations and guidelines under CTA and CT 2 - 7
Potential Importance of Mineral Material Deposit	Alternative** sources are available		Alternative** sources are not available.

^{*}Designated recreation sites that depend upon or exist in mineral material pits generally will not be considered to be in conflict with mining

operations for the purposes of setting up a buffer zone.

**To be considered an alternative source, a mineral material site must be available within 30 miles driving distance of the construction site(s) where the mineral materials would be utilized or the commercial distribution center(s) where the mineral materials would be privately sold as raw materials or as finished products. In addition, an alternative source must not require travel through more than one population center including and limited to Bend, Prineville, Redmond, and Sisters. Alternative site(s) can be eliminated from consideration if the quality of material from the source(s) is demonstrably unacceptable.

mitigated. Development of valid mining claims must include measures to mitigate conflicts with recreation and residents in notices and plans of operation where such conflicts exist. Mineral material sales would not be allowed within 1/8 mile of residentially zoned areas or designated recreation sites.

.

Common to Alternatives 2 - 7, mineral material sites with ½ mile of developed recreation sites and residentially zoned areas, mineral extraction, processing, and equipment operation would be allowed between 7:00 a.m. and 6:00 p.m. Monday through Friday; and for sites located farther than ½ mile from developed recreation sites and residentially zoned areas, those activities would be allowed between 7:00 a.m. and 10:00 p.m. Monday through Friday. No operations would take place at mineral material sites on weekends or certain legal holidays. Blasting would be allowed for mineral material sites within one mile of developed recreation sites, residential areas, and agricultural use sites involving the raising of animals between 9:00 a.m. and 5:00 p.m. Monday through Friday; and the operator must provide written notification to land owners and inhabitants within one mile at least 48 hours prior to the time blasting starts. For extended blasting operations, such notification must be given at least once each month. No blasting at mineral material sites is allowed on weekends or any of the legal holidays (see Appendix A for complete details on surface mining restrictions).

Exceptions to restrictions on mineral material site operations may be granted if conflicts with residents, recreational uses, and other management objectives can be mitigated. Exceptions may also be made for administrative purposes.

.

Alternatives 2 – 7 would also provide recreational rockhounding opportunities while protecting other resource values. Rockhounding resources would be managed to provide long-term recreation opportunities while mitigating ground disturbances and discouraging illegal commercial activity and excessive personal use.

Rockhounding

In Common to Alternatives 2 - 7, the Reservoir Heights, Prineville Reservoir, and the portion of the Fischer Canyon site west of Highway 27 would no longer be managed as rockhounding sites. A new site, the Carey Agate Beds, would be designated as a rockhounding site.

On public lands open to rockhounding, the collection of rocks, semi-precious gemstones, and common invertebrate fossils would be allowed in reasonable amounts and for personal use only. "Reasonable amounts" are defined in this plan as 50 pounds per person per day and not to exceed 500 pounds per year. This limit would not include and is separate from the existing limit on petrified wood collection. Any commercial use would require a permit. All persons excavating, digging, or otherwise removing soil to explore for, discover or remove buried rock materials would be required to fill all holes prior to departure from the collecting site. No person would be allowed to create excavations or holes that undermine the root systems of trees, enter into the ground at a non-vertical angle so as to create a tunnel or overhang, or exceed a depth of four feet. In all riparian areas and stream channels including the channel banks, rockhounding activities shall be restricted to surface collection only. No person shall excavate, dig, or otherwise remove soil, sand, or gravel in stream channels to explore for, discover, or remove buried rock materials.

.

Future rockhounding management plan(s) may place different collection limits and regulations on specific sites.

Forest Products

In Alternatives 2-7, harvest of forest products would normally be associated with restoration and fuels treatments and would be designed to meet objectives for forest

health, fire hazard reduction, hazard tree removal, special status species management, visuals, recreation and travel management, and wildlife habitat management. The amount of forest products harvested would vary only slightly between alternatives. The location and priorities for harvest may change with the alternatives according to different vegetation management treatments implemented.

Raw material for a variety of forest products would be made available in all alternatives. Objectives for ecosystem and fuels management during the 15-year life of this plan would result in the production of primarily small diameter material, generally in the range of 4 to 12 inches DBH. This size of material could be suitable for production of products such as small sawlogs, house logs, posts and poles, chips, fuel biomass, firewood, and various specialty products.

It is anticipated that fuels reduction and forest restoration treatments would also produce a relatively high proportion of green material in the 4-8 inch DBH class. This size of tree has previously been considered "non-merchantable" and was typically disposed of by piling and burning. Due to fire hazard and smoke concerns within the priority wildland-urban interface treatments areas, most of this material would be removed off-site in all alternatives. An effort would be made to encourage the development of markets and other outlets that could utilize large quantities of this small size material. The on-site location of temporary portable chippers/grinders, portable biomass/energy production, and new types of specialized equipment for moving and processing this material could be authorized. To maintain site productivity (organic matter and nutrients), limit re-establishment of trees and brush, and discourage cross-country motorized travel, much of the fine materials not utilized (seedlings, saplings, tops, and branches less than 4 inches in diameter) would be left scattered on the forest floor where it would not contribute to ladder fuels.

Special forest and range products would be managed according to sustainability limits and where consistent with other resource management objectives. These products would be harvested by permit only and management would be guided by site-specific NEPA guidance and permit collection regulations (see Table 2-1: Comparison of Alternatives for forest product volumes produced under each alternative, and Appendix F: Best Management Practices).

Military Uses

Common to Alternatives 2-7 would provide management direction to ensure consistency with planned and approved activities with environmental requirements, integrated resource management plans, and conflict resolution with neighbors on public lands authorized for long-term and short-term military use. Common to Alternatives 2-7 would be the use of at least 20,000 acres adjacent to the BIAK training center for long-term military training use. Common to Alternatives 2-7 would also provide a reliable land base suitable for meeting short- and long-term resource management and nation and state readiness needs, and would provide areas sufficient to avoid continual use of the same training area.

Visual Resources

Common to Alternatives 2-7 would apply VRM classes that emphasize retention of high visual quality along high use travel routes, on prominent landforms that provide community backdrops, and at recreation destinations such as reservoirs and state parks. In addition, Common to Alternatives 2-7 would emphasize the following:

Managing VRM Class 1 lands to preserve the existing character of the landscape.
 Where natural, ecological changes dominate, the level of change provided by

management actions should be very low and not attract attention. (see also Wilderness Study Area section)

- Managing VRM Class 2 lands for low levels of change to the characteristic landscape. In these areas, management activities may be seen but should not attract the attention of the casual observer. Changes should repeat the basic elements of form, line, color, texture, and scale found in the predominant natural features of the characteristic landscape.
- Managing VRM Class 3 lands for moderate levels of change to the characteristic landscape. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements of form, line, color, texture, and scale found in the predominant natural features of the characteristic landscape.
- Managing VRM Class 4 lands for moderate levels of change to the characteristic landscape. Management activities may dominate the view and be the major focus of viewer attention. Every attempt will be made to minimize the effect of management actions through careful location, minimal disturbance, and repeating the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Under Alternatives 2 - 7, all BLM administered lands in the planning area would be managed to meet the following Visual Resource Management Classes:

- VRM Class 1 areas Preserve the existing character of landscapes (approximately 32,928 acres).
- VRM Class 2 areas Retain the existing character of landscapes (approximately 37,590 acres).
- VRM Class 3 areas Partially retain the existing character of the landscape (approximately 88,179 acres).
- VRM Class 4 areas Allow major modifications of existing character of landscapes (approximately 246,163 acres).
- VRM Class 5 areas Areas in need of rehabilitation from a visual resource standpoint (approximately 8 acres).

The Visual Resources Management Classification map (Map 22) shows the location of visual resource management classes. The following list identifies general areas that are included in each VRM Class in the UDRMP area:

VRM Class 1:

Badlands WSA Steelhead Falls WSA Horse Ridge ACEC/RNA/ISA

VRM Class 2:

Areas visible from Prineville Reservoir (foreground views)
Smith Rock block
Horse Ridge and Dry Canyon
Portions of West Butte area
Dry Canyon in Cline Buttes
Deschutes River corridor
Crooked River corridor

Ochoco Reservoir parcel Cline Buttes slopes visible from the Redmond area Wagon Roads ACEC Powell Butte RNA Redmond Caves parcel

VRM Class 3:

Skeleton Fire area

West Butte area

Areas visible from Prineville Reservoir (background views)

Smith Canyon area

Immediate foreground view of State Highway 20, 26, 27, 126, Powell Butte Highway, -Juniper Canyon Road, Reservoir Road, except where superceded by other VRM Class designations

VRM Class 4:

Covers most of the remainder of planning area

VRM Class 5:

Crooked River Canyon area north of Chimney Rock Wild and Scenic River segment

Recreation

Common to Alternatives 2 -7 would be to provide and maintain a wide range of recreation opportunities while meeting overlaying resource management objectives within the planning area and urban interface setting. The common objective is to increase the quality of recreation experiences by moving toward an overall designation of road and trail systems throughout the planning area, which, if implemented, would provide more user information, and a consistent set of opportunities that can be accessed by both local and out-of-area visitors. Additional recreation opportunities through new trail development are emphasized, both to increase diversity and to meet projected increases in recreation demand. Common to Alternatives 2 – 7 provides management direction to maintain a wide range of recreation opportunities that contribute to meeting projected recreation demand while meeting overlaying resource management objectives within the planning area and urban interface setting.

Common to Alternatives 2-7 would identify all lands within the planning area except those located north of Prineville as the BLM Central Oregon Special Recreation Management Area. The specific components of this SRMA are identified (See Special Recreation Management Areas Map 7) as:

- Badlands WSA
- Bend/Redmond Recreation Area
- Cline Butte Recreation Area
- Horse Ridge Recreation Area
- Northwest Recreation Area
- La Pine Recreation Area
- Mayfield Recreation Area
- Millican Plateau OHV Area

- North Millican OHV Area
- Prineville Reservoir Recreation Area
- Smith Rock Recreation Area
- Steamboat Rock Recreation Area
- South Millican OHV Area
- Steelhead Falls WSA
- Tumalo Recreation Area

Due to the scattered nature of the public land parcels surrounding and north of Prineville, this area was not identified as part of the SRMA.

.

All alternatives would have common objectives to manage off highway motorized vehicle and non-motorized vehicle use to provide visitor satisfaction, protect natural resources, provide visitor safety, and minimize conflicts among various users and neighbors. Non-motorized recreation opportunities would also be provided to offer visitor satisfaction, protect natural resources, and minimize conflicts among users and neighbors. Designated access points, which include entry points, and parking areas, trailheads, and staging areas would be designated and managed to enhance visitor experience, protect resources, and minimize conflicts with neighboring land owners.

Common to Alternatives 2 - 7 and Common to All Alternatives would be designations of BLM managed lands within the planning area as Open, Limited, or Closed for the operation of off highway vehicles. Each alternative varies in the amount and distribution of these various travel management designations throughout the planning area. The location and distribution of these travel management designations reflect the overall themes of each alternative. The following criteria are used, along with other resource objectives and goals, in designating travel management objectives for different areas.

Open-CTA

Designate sites managed for intensive and highly managed use (where significant resource or social conflict issues are not expected) as Open. As defined in the BLM's National OHV Strategy (2000), the "BLM designates areas as 'open' for intensive Off-Road Vehicle (ORV) use where there are no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting cross-county travel."

Limited

Designate areas where motorized public access is managed to meet specific recreation and resource management objectives as Limited. As defined in the BLM's National OHV Strategy, the agency designates areas as "limited" where it must restrict motorized OHV use in order to meet specific resource management objectives. These limitations may include:

- 1. Restricting the types of vehicles uses in an area
- 2. Restricting motorized vehicles to designated roads and/or trails
- 3. Limiting the season or time of use.

Closed

Designate areas where motorized use should be restricted to protect resources, ensure visitor safety, or reduce conflicts as Closed. Areas are closed to motor vehicle use where recreation management emphasis is on providing non-motorized recreation.

Appropriate recreational opportunities would also be provided, while reducing conflicts between recreational users, and between recreational users and adjacent landowners; in addition:

To protect and maintain ACEC/RNA values, the Powell Butte ACEC/RNA and the Horse Ridge ACEC/RNA will be closed to camping/overnight use;

To ensure recreational settings remain as interpretive sites and to reduce effects on cultural resources, The Wagon Roads ACEC and Tumalo Canals ACEC will be closed to camping/overnight use;

To reduce conflicts with neighboring landowners and provide a day use recreation setting in predominantly urban settings, the following would be closed to overnight use: Parcel north of State Highway 126 and west of the North Unit Canal; Redmond Caves parcel;

BLM parcel north of Highway 126 and adjacent to Cline Falls State Park;

40-acre parcel on State Highway 97 south of Deschutes Junction;

All designated parking areas, staging areas, and trailheads unless specifically authorized and posted;

Sisters Bouldering Area.

Interim Road and Trail Designations:

Common to Alternatives 2 – 7, until completion of site-specific identification of local road or trail designations, an interim system of local roads and trails would be designated in each geographic subdivision.

In all areas, construction, placement or maintenance of roads or trails without authorization, contract, or approved operating plan would be prohibited.

Group Use/Special Recreation Permits

These alternatives would also provide for projects, programs, and permits that promote a diverse range of recreation opportunities, as well as provide for individual, group, and competitive event recreational use that could not be reasonably accommodated on private land (See Appendix A for a complete description of special recreation permits, group use and commercial use).

Wilderness Study Areas

No motorized group use, competitive use, or vending would be allowed in the Wilderness Study Areas, and SRPs would be required for all organized group activities involving greater than 12 participants (see Appendix A for additional requirements for SRPs in WSAs).

Geographic Areas

Allowable uses, allocations and guidelines, which generally vary according to alternative, apply to specific portions of the planning area. Common to Alternatives 2 - 7, the geographic subdivisions would be managed to meet one or more of the following objectives:

- Off highway motorized vehicle use would be managed to provide visitor satisfaction, protect natural resources, provide visitor safety, and minimize conflicts among various users and neighbors.
- Non-motorized recreation opportunities would also be provided to offer visitor satisfaction, protect natural resources, and minimize conflicts among users and neighbors.

- Designated access points, which include entry points, parking areas, trailheads, and staging areas, would be added to enhance visitor experience, protect resources, and minimize conflicts with neighboring land owners.
- Developed or urban based recreation opportunities would be provided, while minimizing duplication of services among agencies.
- Recreation projects and programs that promote recreation management objectives and support community economic strategies would be provided.
- Competitive and group events would be provided for when that use could not be reasonably accommodated on private land.
- Provide recreation projects and programs that promote recreation management objectives and support community economic strategies would be provided.

Bend/Redmond

The main block located between State Highway 126 and Powell Butte Highway would be designated as Limited to designated roads and trails; open year-round (see Map 9). Highway 97 parcel would be designated as Closed to motor vehicles. The 1,360 acre area surrounding the southern portion of the Wagon Roads ACEC would be designated Closed to motor vehicles.

Cline Buttes

The main block (the area between Cline Falls Highway and Fryrear Road) would be Limited to designated roads and trails. The following parcels would be designated as Closed to motorized vehicles:

- Harper Road Parcel
- Youngs Avenue Parcel
- All portions of the Cline Buttes block located east of the Deschutes River, including the Jaguar Road parcel
- BLM Parcel adjacent to Cline Falls State Park
- The Tumalo Canal ACEC east of Barr Road

Horse Ridge

The following areas would be Closed to motor vehicle use:

- Small parcels surrounding Conestoga Hills Estates.
- The BLM managed lands bounded by State Highway 20 on the east, Rickard Road on the south, and private lands to the west and north.
- Horse Ridge ACEC/RNA.

The Skeleton Fire area between the Deschutes National Forest boundary, Old Highway 20, the private lands at Gosney Road, and Horse Ridge would be managed for motorized use on designated roads only.

La Pine

Motor vehicle travel would be Limited to a designated system throughout the majority of the area. Approximately 10 small, isolated parcels (generally 40 to 320 acres in size) would be designated as Closed to motor vehicle use. Administrative entry for critical

activities to ensure public health and safety (i.e. fire suppression and hazardous fuels treatments) would be granted on a case-by-case basis.

Mayfield

The Airport Allotment and the area within the fence around Mayfield Pond would be Closed to motor vehicles.

Millican Plateau

The Millican Plateau OHV area would be maintained for OHV use on designated roads and trails (the size of the area and seasons of use may vary by alternative). The following areas would be Closed to motor vehicles:

- Powell Butte ACEC/RNA
- Isolated BLM parcels within the Juniper Acres subdivision
- Isolated block of public land on top of Powell Butte (except for a designated entry road
 and parking area if private lands or an easement is acquired that provides legal access
 to BLM managed lands).
- Millican Cliff area on east side of Millican Road

North Millican

The North Millican OHV area would be maintained for OHV use on designated roads and trails (the size of the area, trail density, and seasons of use may vary by alternative). The ODOT Pit Play Area would be Open year round. Hill climbs would be closed and rehabilitated if necessary.

Prineville

The following areas would be designated as Closed to motor vehicles:

- The 160-acre Barnes Butte Parcel
- The 640-acre Ochoco Reservoir parcel
- The Dry Canyon parcel located in T 15 S., R 14 E., Sec. 3

Prineville Reservoir

Motorized travel in the Taylor Butte area would be Limited to designated roads.

Steamboat Rock

The following areas would be designated Closed to motor vehicles:

- All isolated parcels northwest of Redmond would be designated as Closed to motor vehicles year-round, except for BPA powerline parcel¹⁹.
- BLM parcel at Crestridge Estates.
- Both BLM parcels at Tetherow Buttes
- The BLM parcel adjacent to Lower Bridge Estates

¹⁹ This area, due to multiple access points and private property boundaries, would be difficult to close.

- Approximately 120-acre area of BLM land north of Parkey Road and NW 81st Street in Crooked River Ranch.
- Vehicle access to Steamboat Rock would be limited to designated parking areas, in order to control the expansion of cleared areas surrounding the rock.

Transportation and Utilities

Management direction Common to Alternatives 2-7 would add components to the transportation and utility management direction that is Common to All Alternatives, or otherwise not changed by this RMP. These added components are primarily in the areas of regional and local transportation systems, but also include direction that relates to utility corridors and future new or expanded rights-of-way.

Management direction Common to Alternatives 2-7 emphasizes regional and local integrated transportation planning, provides transportation corridor allocations for anticipated needs and provides a mechanism to reduce the amount of redundant or unneeded roadways and minimize the fragmentation of wildlife habitat and public land ownership patterns.

Common to Alternatives 2 - 7 would be the designation of a transportation corridor for the relocation of State Highway 126 to avoid the proposed runway expansion and subsequent protection zone. The proposed corridor would be ½ mile wide and extend for approximately 1½ miles (see Map 2). Until a final determination of the need for that corridor to occur on public lands was made, other uses within that area would not preclude future use of the area that purpose.

Local Transportation

Management direction Common to Alternatives 2 - 7 would establish an integrated, designated transportation system within the planning area with road management objectives that would include designated maintenance levels, vegetative condition, and the purpose for access. The number and location of roads that are designated collectors varies by alternative. Local roads would not be designated under any alternative, but would be designated during subsequent site-specific plan implementation.

Management direction Common to Alternatives 2 - 7 would provide for designating future site-specific locations and numbers of recreation and travel access points and development standards. Guidelines would be provided for working with state and local governments to eliminate unsafe access points for both roads and trails, and to reduce potential conflicts between motorized recreation and other uses.

Management for local roads that primarily provide access to BLM-administered lands would include criteria Common to Alternatives 2 - 7 that would be used in the future to designate specific roads that would become part of the transportation system. This includes, but is not limited to, consideration for public access for recreation or other authorized land uses, emergency access for rural residents, fire and resource protection needs, and wildlife habitat disturbance or fragmentation.

The differences in the transportation systems for each of these alternatives are highly dependent upon future decisions concerning the local road configuration. The two resources most likely to influence these configurations are recreation and wildlife. In general, those areas with "primary" wildlife emphasis are likely to have fewer local roads that remain open compared to areas with minor wildlife emphasis. Non-motorized categories of recreational use include designations labeled "non-motorized emphasis" and "non-motorized exclusive". Areas designated as non-motorized emphasis allow

94

motorized use on roads, but not on trails. Non-motorized exclusive areas are closed to all motorized uses. In some cases, areas that have a non-motorized recreation emphasis and a primary wildlife emphasis would have the fewest future local road designations.

Right-of-Way Corridors

New areas identified as priority by the Western Utility Group in 2002 would be added to the area designated in the Western Regional Corridor Study of 1993. These areas are identified as "Western Utility potential corridors." All existing rights-of-way would be designated as "future local corridors" to facilitate collocation of compatible uses.

New or expanded right-of-way projects would require appropriate mitigation to reduce unnecessary roads in an area and to minimize the fragmentation of public lands. Appropriate mitigation may include but not be limited to vacating or transferring jurisdiction of roads no longer needed in an area, seasonally or permanently closing other roads within an area, limiting seasons or amounts of uses within an area, or seeding and rehabilitating areas in the vicinity of new or expanded projects.

Land Ownership

Alternatives 2 - 7 would identify lands for retention based on resource values and overall management objectives; lands for disposal that generally do not provide substantial resource, public, or tribal benefits that may not be cost effective for the BLM to manage or that would represent a greater public benefit in other ownership; and lands for community needs and uses.

In general, Alternatives 2 - 7 would provide direction to manage lands to improve the effectiveness of habitats and management capabilities, and identify desirable acquisition parcels based on overall resource values and management and administrative objectives.

Public Health and Safety

Common to Alternatives 2 - 7 management direction would emphasize a reduction and eventual end to dumping, especially in habitual dumping areas, reducing the potential for human-caused wildland fire in high-risk areas, and an increase in the enforcement of existing Oregon state and local laws. Common management direction would also minimize the chance of errant firearm discharge toward public land users and adjacent residents, provide safe and compatible recreation opportunities, and protect natural and cultural resources.

Habitual - Illegal Dumping Areas

Common to Alternatives 2 - 7 management direction would emphasize reducing opportunities for illegal dumping of residential, commercial, industrial, and hazardous waste throughout the planning area, and especially in habitual dumping areas. Closure or restriction of user-created travelways or local roads that access habitual dumping areas would serve as the primary tool to reduce dumping.

The following habitual dumping sites have been identified as being especially problematic, and would be placed on a priority list:

- 1. South of Prineville along Millican Road;
- 2. South of Prineville at Juniper Canyon;
- 3. South of Prineville off Remington Road;
- 4. South of O"Neil Highway and west of the North Unit Canal;

- 5. East of Redmond and west of the North Unit Canal;
- 6. South of Redmond along Airport Avenue;
- 7. Northeast of Bend off of the Powell Butte Highway;
- 8. Immediately north and south of Alfalfa Market Road;
- 9. Barr Road in the southern portion of Cline Buttes;
- 10. Lands at the State Highway 126/Barr Road/Buckhorn Road intersection;
- 11. Steamboat Rock area west of Terrebonne and South of Crooked River Ranch;
- 12. Numerous locations in La Pine.

Campfires

Common to Alternatives 2-7, management direction would provide for public health and safety and appropriate recreation opportunities, and reduce the risk of wildland fire associated with high use, habitual problem areas and/or special management considerations.

The following areas would be closed to campfires seasonally, from June 1 to October 15 Common to Alternatives 2 - 7. If determined necessary, the fire closures could be extended based on existing conditions:

- All BLM parcels in the Steamboat Rock block;
- All BLM parcels in the Smith Rock block;
- Awbrey Falls block in Cline Buttes.

The following areas would be closed to campfires all year in Common to Alternatives 2 - 7:

- Powell Butte RNA;
- Horse Ridge ACEC/RNA;
- Wagon Roads ACEC;
- Tumalo Canal ACEC;
- BLM parcel north of Highway 126 and adjacent to Cline Falls State Park
- Redmond Caves parcel;
- All designated parking areas, staging areas, and trailheads unless specifically authorized and posted.

Law-Enforcement

Common to Alternatives 2-7, management direction would help promote the agency goal of maintaining a consistent and cooperative working relationship between local, state, and law enforcement, streamlining regulations where possible to improve that cooperation.

To enhance this streamlining, and Pursuant to 43 CFR 924.0-3 and 9264.1, the following acts would be prohibited on BLM land within the UDRMP planning area administered by the Bureau of Land Management:

 Operation and use of a motor vehicle on public lands in violation of Oregon State motor vehicle laws;

- Possession and or use of alcoholic liquor in violation of any Oregon State alcohol liquor laws;
- Taking possession of, occupying, or otherwise using public lands for residential purposes without a permit from the Bureau of Land Management;
- Possession and or use of a firearm in violation of any Oregon State firearm laws.

Firearm Discharge

Common to Alternatives 2-7, management direction would minimize risk of errant firearm discharge to users of public lands and neighbors, and provide safe and compatible recreation opportunities. To meet these objectives, public lands would be closed to all firearm discharge 20 or firearm discharge unless legally hunting 21 now or in the future. Alternatives 2-7 would include a common emphasis to coordinate with local governments to reduce the risk of errant firearm discharge in and around residentially zoned 22 areas adjacent to BLM managed lands. Decisions concerning areas open or closed to firearm discharge would consider numerous factors, including those listed below. These factors provide a framework for present and future decisions that would protect resource values at risk, preserve public health, safety, and welfare, minimize user conflicts, and maintain consistency and cooperation. Tables 2-14a and 2-14b describe areas that would be closed 23 under Common to Alternatives 2-7 conditions of those closures.

- High Density Use Areas-lands may be closed based on an evaluation of the present
 and future intensity of recreational use such as the type and variety of recreational
 activity, safety of users, type and size of recreational groups, geography, topography,
 presence of facilities (parking lots, bathrooms, roads, trails, interpretive signs
 and exhibits), ownership and use of surrounding properties, and ease of closure
 enforcement.
- Compatible Recreation Opportunities Areas with a non motorized exclusive recreation emphasis would be closed to all firearm discharge, or all firearm discharge unless legally hunting.
- Natural Resource Protection BLM lands with reoccurring firearm discharge
 problems, or lands containing important natural and cultural resources (including
 but not limited to unique natural resources, sensitive species, geologic features, and
 historical and archaeological remains) may be closed to all firearm discharge or firearm
 discharge unless legally hunting.
- Intergovernmental Cooperation Cooperative closures would be considered where city, county, state or federal agencies that own, manage, or have legal jurisdiction over adjacent lands have established similar closures. These types of closures would include but are not limited to, closures adjacent to residential areas with similar city or county-wide closures, state or county parks, or areas within urban growth boundaries. Exact area and conditions of these closures would be determined through site-specific analysis, considering factors such as things such as the ease of boundary identification and local conditions, but would generally be between 150 yards and one mile in depth.

²⁰ A closure to all firearm discharge would not apply to:

A person conducing the official business of BLM personnel or their designee, including but not limited to: Acting in defense or
protection of an individual, dispatching a critically injured animal for humane purposes, or dispatching a dangerous or damagecausing animal, and

^{2.} Discharge of projectiles with a limited range where, should the shooter miss their target, the projectile is likely to hit the ground before hitting other unintended targets including but not limited to: A bow or compound bow and arrow, a slingshot, a BB gun, or a paintball gun, and

Discharge of weapons utilizing "blank" ammunition where no projectile is discharged including but not limited to: Blanks for dog training purposes, or by the military for official training purposes.

²¹ Hunting is defined as "To take or attempt to take any wildlife by means involving the use of a weapon or with the assistance of any mammal or bird (ORS 496.004 (10))."

²² May apply to other types of land use zones with non-conforming uses, and high-density residential developments in non-residential zones.

²³ All existing closures provide for the authorized officer to make exceptions to the closure on a case-by-case basis.

Table 2-13a: Closed to all firearm discharge

Cline Buttes Block	Cline Falls State Park, BLM land across Hwy 126 from Cline Falls SP, 2 triangular isolated pieces east of Middle Deschutes River, Jaguar Road isolated parcel, Young Avenue isolated parcel
Horse Ridge Block	40-acre and 80-acre peninsulas of BLM on the west side of the Conestoga Hills subdivision
Northwest Block	120-acre north-south isolated block, 2 40-acre southernmost isolated blocks
Bend/Redmond Block	Redmond Caves, isolated 40-acre parcel with white bridge
Steamboat Rock Block	All isolated pieces, BPA station
Prineville Reservoir Block	160 acres surrounded by Prineville Lake Estates, Units 1&2 subdivision
La Pine Block	8 isolated parcels north of La Pine

Table 2-13b: Closed to firearm discharge unless legally hunting

Mayfield Pond Block Badlands Block	½ mile around Alfalfa Pond ½ mile around Reynolds Pond
Steamboat Rock Block	Large parcel – north of Lower Bridge Road, Middle Deschutes WSR, isolated pieces along Middle Deschutes and Crooked Rivers north of WSR boundaries, western portion of Steelhead Falls WSA outside Middle Deschutes WSR
Prineville Reservoir Block	Isolated and limited contiguous BLM lands near the Crooked River
Millican Plateau Block	Powell Butte RNA
Prineville Block	Powel Butte Block
Horse Ridge Block	Horse Ridge ACEC/RNA
Smith Rock Block	All BLM lands in the Block

Archaeology

Alternatives 2 – 7 would protect "At-Risk," significant archaeological resources from accidental or intentional loss due to human activities and natural causes. The locations of "At-Risk," significant archaeological resources would be withdrawn from the activities of surface disturbing mineral material development. "At-Risk," significant archaeological resources shall include, but not be limited to, the area around Redmond Caves, identified segments of the Horner and Bend-Prineville historic roads, an identified segment of the old Tumalo canal, the area in the vicinity of Pictograph Cave, and the area near Steelhead Falls. Inventories are conducted to determine the amount, extent and nature of the cultural resource base in the planning area.

In addition, Alternatives 2-7 would emphasize increasing the public's opportunity to learn about and enjoy the cultural, educational, and recreational uses of heritage resources by interpreting the identified "At-Risk," significant archaeological resources found within the planning area.

Interpretative developments would be based on combined evaluations of:

- 1. Severity and immediacy of threats (see Table 2-14)
- 2. Significance of heritage properties as noted in Table 2-15
- 3. Opportunities for partnerships/cost sharing (Table 2-16)
- 4. Opportunities for interpretive and public education products as noted in Table 2-17 ("At-Risk," significant archaeological resources that have yet been discovered can also be factored into the Table for prioritization).

98

Table 2-14: Severity and Immediacy of Threats to Significant At-Risk Resources.

			Historic Tuma	lo Canals				
	Soil Compaction	Vandalism	Artifact Collection	Erosion	Surface Disturbance	Dumping	Fire	Total
Severity of threat	2	1	1	2	2	1	1	10
Immediacy of threat Total	3	1	2	2	2	1	1	11 21
			Historic Horn	ner Road				
Severity of threat	3	1	1	1	3	1	1	11
Immediacy of threat Total	3	1	1	1	3	2	1	12 22
10ta1		<u>His</u>	toric Bend-Pri	neville Roa	<u>d</u>			22
Severity of threat	3	1	1	2	2	1	1	11
Immediacy of threat	1	1	1	1	1	1	1	7
Total			Steelhead	<u>Falls</u>				18
Severity of threat			•					
Immediacy of	1	1	1	1	1	1	1	7
threat Total	1	1	1	1	1	1	1	7 14
10ta1			Redmond	<u>Caves</u>				14
Severity of threat								
Immediacy of	2	3	1	1	1	3	3	14
threat Total	2	2	2	1	2	3	2	14 28
			<u>Pictograph</u>	Cave				
Severity of threat	1	2	2	1	2	1	2	11
Immediacy of threat	1	1	1	1	1	1	1	7
Total								18

Numerical ranking of threat where, Low=1; Moderate=2; High=3 Severe = intense, serious, extreme, unrelenting. Immediate = direct/indirect.

Table 2-15: Priority ranking of at-risk significant archaeological resources

At-Risk Resources	Severity & Immediacy of Threats	Significance of Heritage Property	Opportunities for Partnerships/ Cost-Sharing	Opportunities for Interpretive & Outreach Products	Weighted Ranking (max. 500)
Weight	30%	50%	10%	10%	100%
Horner Road	3	3	3	5	320
Tumalo Canals	3	3	3	5	320
Redmond Caves	4	1	4	5	260
Bend/Prineville Road	2	2	2	2	200
Steelhead Falls	2	1	2	2	150
Pictograph Cave	2	1	1	2	140

Weighted ranking is determined by multiplying severity and immediacy of threats, heritage property significance, and opportunities by their respective weight percentages. (Example): Horner Road: 3x30%; 3x50%; 3x10%; and 5x10% = 320.

RANKING KEY

Severity/Immediacy of Threats:	Potential Significance of Heritage Property
5 = 35-42	5 = A, B, C, D, & Discretionary
4 = 27-34	4 = A, B, C, D
3 = 19-26	3 = Three of A, B, C, or D
2 = 11-18	2 = Two of A, B, C, or D
1 = 0-10	1 = One of A, B, C, or D
Opportunities for	Opportunities for Interpretive
Opportunities for Partnerships/Cost-Sharing	Opportunities for Interpretive & Public Outreach Products
* *	**
Partnerships/Cost-Sharing	& Public Outreach Products
Partnerships/Cost-Sharing 5 = 100% of participation/funding likely	& Public Outreach Products 5 = 5 or more products
Partnerships/Cost-Sharing 5 = 100% of participation/funding likely 4 = 80% of participation/funding likely	& Public Outreach Products 5 = 5 or more products 4 = 4 products
Partnerships/Cost-Sharing 5 = 100% of participation/funding likely 4 = 80% of participation/funding likely 3 = 60% of participation/funding likely	& Public Outreach Products 5 = 5 or more products 4 = 4 products 3 = 3 products

Table 2-16: Opportunities for Partnerships and Cost-Sharing

	Redmond Caves	Steelhead Falls	Horner Road	Bend- Prineville Road	Tumalo Canals	Pictograph Cave
City of Redmond	Х					
CTWS	X	X				X
Deschutes County			Χ	X		
Deschutes NF	X					
ASCO	X	X	Χ	X	Χ	X
Deschutes Co. Hst.			X	Χ	X	
Soc.						
Tumalo Irrigation Dist.					X	
BLM Rec. Program	Χ	X	Χ		Χ	
Other Interested Parties						
Total	5	3	4	3	4	2

 $Numerical\ ranking\ of\ Partnership/cost-sharing\ opportunities\ where,\ 1-2\ opportunities\ =Low;\ 3-4\ opportunities\ =Moderate;\ greater\ than\ 4\ opportunities\ =High.$

Table 2-17: Opportunities for Interpretive/Public Outreach Products

	Redmond Caves	Steelhead Falls	Horner Road	Bend- Prineville Road	Tumalo Canals	Pictograph Cave
Signs	Χ	Χ	Χ	Χ	Χ	
Kiosks			Χ		Χ	
Self-guided Tours	X		X	X	Χ	
Brochures	X		Χ		Χ	
Interpretive Trail	X		Χ		Χ	
Tribal Input	Χ	Χ				Χ
Total	5	2	5	2	5	1

 $Numerical\ ranking\ for\ development\ of\ Interpretive/Public\ Outreach\ products\ where,\ 1-2\ products\ =Low;\ 3-4\ products\ =Moderate;\ greater\ than\ 4\ products\ =High.$